DRAFT

PRELIMINARY ENVIRONMENTAL ASSESSMENT EQUIVALENT DOCUMENT ALEXANDER HAMILTON HIGH SCHOOL 2955 S ROBERTSON BLVD, LOS ANGELES, CA 90034

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EXECUTIVE SUMMARY

At the request of the Los Angeles Unified School District (LAUSD), Terraphase Engineering Inc. (Terraphase) completed a Preliminary Environmental Assessment - Equivalent (PEA-E) study for the Alexander Hamilton High School located at 2955 South Robertson Boulevard in Los Angeles, California (the Site; Figure 1). The sampling plan for the PEA-E study was based on the findings of an August 2017 Phase I Environmental Site Assessment (Phase I ESA; Roux Associates, Inc. 2017), as modified by input from the Office of Environmental Health and Safety (OEHS 2018). This PEA-E summarizes historical land use, and outlines the approach and results from recent assessment during 2018 and 2019. This report was prepared in general conformance with the Preliminary Endangerment Assessment Guidance Manual published by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC 2015a).

Roux's Phase I ESA indicates that the Site has been occupied by the school campus since 1931. Limited residential use on the Southwest portion of the Site was noted to have occurred until 1977 when Kincardine Avenue was noted as being rerouted to south of the Site (Roux 2017). The Site is owned and operated by the LAUSD. The current configuration of the school includes classroom buildings (main building, laboratory classroom building, humanities classroom building and technology classroom building), portable classroom units, a photography studio, an arts building, storage structures, two gymnasiums with locker rooms, a cafeteria, an assembly hall, an outdoor gravel track and football field with bleacher seating, a parking structure with elevated tennis courts, a baseball field, paved parking area, paved outdoor areas, and landscaping. The Site is bounded by residential areas to the north, west and south, and mixed use residential/commercial to the east.

LAUSD intends to remove four buildings (the Laboratory Classrooms, Humanities Classrooms, Photo Studio, and Music Building) and several ancillary structures from the Site (Figure 2), construct new classroom buildings, a central plant, and new landscaped areas in their place, and modernize the athletic fields.

The primary objectives of this PEA-E were to screen shallow soil at the Site for chemicals of potential concern (COPCs), including arsenic, lead, polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and dioxins/furans in accordance with typical DTSC guidance for school sites; to evaluate the health risk based on soil results for COPCs; and to screen soil vapor at the Site for VOCs in the vicinity near potential off-Site and on-Site sources of VOCs.

Field sampling activities for the PEA-E study were conducted between August 2018 and November 2019. Field activities included sampling of shallow and deep soil samples for chemicals of potential concern (COPCs) throughout the property in support of the Alexander Hamilton High School Modernization Project. Additionally, soil vapor probes were installed to assess volatile constituents in soil vapor that may be present due to historical uses and potential off-Site sources. Figure 2 present a Site layout showing soil sample and soil vapor probe locations. Large scale maps showing the locations of step-out samples are presented as Figure 3a through 3i. Boring logs are included as Appendix A. A photograph log of representative activities completed during the PEA-E study is included as Appendix B.

Shallow soil and soil vapor sample results from the PEA-E survey indicate that select COPCs, including arsenic and lead in soil and benzene, ethylbenzene, and tetrachloroethene in soil vapor, are present at concentrations above the Site-specific action levels (SSALs) typical of school sites in California. The PEA-E survey results in the vicinity of the Humanities Classrooms, the Photo Studio, the west side of the Laboratory Classrooms, the north side of the Girls' Gym, the west side of portable building (B1, B2), and the north central portion of the Site indicate that elevated levels of arsenic and lead were reported in shallow soil samples analyzed. Conservative estimates of cumulative cancer risk estimates due to vapor intrusion exposure at eight locations were greater than DTSC's recommended risk management goals, and additional assessment and/or remedial action at these locations is warranted.

Based on these results, Terraphase recommends that a Removal Action Workplan (RAW) be prepared for the target COPCs in shallow soil and soil vapor in the above locations related to environmental concerns prior to or during the upcoming construction effort. Large scale figures showing the soil sample locations and suggested excavation boundaries are includes as Figures 6a to 6i. Assuming removal of the arsenic and lead concentrations in soil above SSALs, conservative estimates of cumulative cancer risk and noncancer hazard index (HI) due to direct contact exposure to remaining COPCs in soil were equal to or below DTSC's risk management goals. As such, additional risk management action to address potential direct contact exposures to soil at the Site would not be warranted. Potential removal or mitigation measures to address cancer risks related to vapor intrusion in Site buildings should also be presented and evaluated in the RAW.

CERTIFICATION

This Preliminary Environmental Assessment Equivalent report (PEA-E) has been prepared by, or under the direct supervision of a California Professional Geologist.

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ACRONYMS AND ABBREVIATIONS

APN	Assessor Parcel Number
BGS	Below Ground Surface
Cal/EPA	California Environmental Protection Agency
COPCs	Chemicals of Potential Concern
DTSC	Department of Toxic Substances Control
DVM	Data Validation Memorandum
Enthalpy	Enthalpy Analytical, LLC
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
H&P	H&P Mobile Geochemistry, Inc.
HASP	Health and Safety Plan
HERO	Office of Human and Ecological Risk
HHRA	Human Health Risk Assessment
Jones	Jones Environmental
IDW	Investigative Derived Waste
LAUSD	Los Angeles Unified School District
LBP	Lead-Based Paint
MDL	Method Detection Limit
mg/kg	Milligrams Per Kilogram
OCPs	Organochlorine Pesticides
OEHS	Office of Environmental Health and Safety
PAHs	Polycyclic aromatic hydrocarbons
PCBs	Polychlorinated Biphenyls
PEA-E	Preliminary Environmental Assessment Equivalent Document
PPE	Personal Protective Equipment
RAW	Removal Action Workplan
RECs	Recognized Environmental Conditions
Roux	Roux Associates, Inc.
RWQCB	Regional Water Quality Control Board

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Site	Alexander Hamilton High School, 2955 South Robertson Boulevard, Los Angeles, California
SSAL	Site-Specific Action Level
STLC	Soluble Threshold Limit Concentration
Strongarm	Strongarm Environmental Field Services
SunStar	SunStar Laboratories
SVOCs	Semivolatile organic compounds
TCLP	Toxicity characteristic leaching procedure
Terraphase	Terraphase Engineering Inc.
TPH	Total petroleum hydrocarbons
TPH-g/d/o	Total petroleum hydrocarbons as gasoline, diesel, and oil
TTLC	Total Threshold Limit Concentration
USA	Underground Service Alert
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOCs	Volatile organic compounds
WET	Waste Extraction Test
$\mu g/m^3$	Micrograms per meter cubed

1.0 INTRODUCTION

At the request of the Los Angeles Unified School District (LAUSD) Terraphase Engineering Inc. (Terraphase) has completed a Preliminary Environmental Assessment - Equivalent (PEA-E) for the Alexander Hamilton High School located at 2955 South Robertson Boulevard in Los Angeles, California (the Site; Figure 1). The assessment followed a modified sampling plan prepared by Roux Associates, Inc. (Roux) in April 2018, Updated Preliminary Environmental Assessment Equivalent (PEA-E) Proposed Sampling Summary (Roux 2018), as modified by input from the LAUSD Office of Environmental Health and Safety (OEHS; 2018). The sampling plan was based on the findings of an August 2017 Phase I Environmental Site Assessment (Phase I ESA; Roux 2017) in support of the Alexander Hamilton High School Comprehensive Modernization Project.

LAUSD intends to remove four buildings (the Laboratory Classrooms, Humanities Classrooms, Photo Studio, and Music Building) and several ancillary structures from the Site (Figure 2), construct new classroom buildings, a central plant, and new landscaped areas in their place, and modernize the athletic fields. This PEA-E summarizes Site description and background information, the results of Site historical land use and research, presents the field and laboratory methods and results from Site assessment activities conducted in the project area in 2018 and 2019, and presents the results of a human health risk assessment screening evaluation. This report was prepared in general conformance with the Preliminary Endangerment Assessment Guidance Manual published by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC; 2015a).

1.1 Site Description

The Site is located at 2955 South Robertson Boulevard in Los Angeles, California (Figures 1 and 2). The Site is developed with the Alexander Hamilton High School campus and comprises approximately 20.75 acres of land, identified as Los Angeles County Assessor's Parcel Number (APN) 4311-031-901.

The Site is owned and operated by the LAUSD. Buildings at the Site include four classroom buildings, portable classrooms, photography building, arts building, storage structures, two gymnasiums, cafeteria, and assembly hall. Other developments on the Site include an outdoor track and football field, parking structure with elevated tennis courts, baseball field and paved parking areas. The northwest portion of the Site is developed with Cheviot Hills Continuing School. The Site is bounded by residential areas to the north, west and south, and mixed use residential/commercial to the east.

1.2 Background

The Site has been used as the Alexander Hamilton High School campus since approximately 1931. Roux completed a Phase I ESA for the Site in August 2017, which included a review of historical records, including aerial imagery and topographic maps.

1.3 Regional Geology

The Site lies within the Peninsular Ranges Province. Review of the geologic map indicates that the Site is underlain by Quaternary aged alluvial gravel, sand and silt-clay, derived mostly from the Santa Monica Mountains (United States Geological Survey [USGS] 2005).

1.4 Regional Hydrogeology

The Site is located within the Santa Monica Subbasin, located within the Coastal Plain of Los Angeles Groundwater Basin. This basin has beneficial uses for municipal and irrigation supply (Los Angeles Regional Water Quality Control Board 2014). Review of Roux's Phase I ESA for the Site indicates that the depth to groundwater below the Site is unknown, but groundwater was measured at a depth of 35 ft below ground surface (bgs) at a facility located immediately adjacent to the Site (Roux, 2017).

1.5 Environmental Setting

The purpose of the PEA-E is to identify if environmental issues will need to be mitigated either prior to or during upcoming construction efforts at the Site. Information for historic land use and environmental setting, as presented in the Phase I ESA, is summarized below.

1.5.1 School Property

The Site has been occupied by the school campus since 1931. Limited residential use on the Southwest portion of the Site was noted to have occurred until 1977 when Kincardine Avenue was noted as being rerouted to south of the Site (Roux 2017).

The current configuration of the school includes four classroom buildings (main building, laboratory classroom building, humanities classroom building and technology classroom building), portable classroom units, a photography studio, an arts building, storage structures, two gymnasiums with locker rooms, a cafeteria, an assembly hall, an outdoor gravel track and football field with bleacher seating, a parking structure with elevated tennis courts, a baseball field, paved parking area, paved outdoor areas, and landscaping.

Findings from the Phase I ESA are discussed in Section 1.6, below.

1.6 Discussion of Phase I ESA Items

The following recognized environmental conditions (RECs) in connection with the Site were identified in the Phase I ESA (Roux 2017):

- Based on Site observations and historical records, two boilers are located onsite; one in the basement of the main building constructed in 1931, and one in the ground floor of the girl's gymnasium building constructed in 1936. Floor drains were observed in both boiler rooms. Based on potential historical use of fuel to operate the boilers, it is possible that subsurface is impacted in these areas.

- A photography studio building has been located at the south-central portion of the Site since approximately 1964. During Site reconnaissance, the studio was observed to contain dark rooms with photo-processing chemicals. Plugged floor drains were also observed within the studio. Based on the nature of the operations in the studio, it is possible that photo-processing chemicals may potentially impact the subsurface in this area.

- Based on Site observations and historical Site plans from 1966, a clarifier is located in the parking area north of the arts building and was associated with the former auto shop area. Based on the age of the clarifier and nature of its operation, it is likely that it may have leaked over time.

- Elevators were observed in the humanities and laboratory classroom buildings, constructed approximately in the 1960s. Personnel at the school were not aware of the maintenance schedule of if hydraulic fluids may contain polychlorinated biphenyls (PCBs). Based on the age of the elevators, it is possible that they may have leaked and impacted the surrounding subsurface.

- The current maintenance materials shed was historically used as a hazardous materials storage shed until the early 2000s, containing small quantities of vehicle maintenance fluids. It is possible that maintenance fluids or chemicals stored in the shed may have been released, potentially impact the surrounding subsurface.

- Site structures planned for demolition have been located at the Site since the 1960s. Due to their age, lead-based paint (LBP) may have been used in construction and maintenance activities and therefore may impact shallow soils in the immediate vicinity of the buildings planned for demolition. Also, organochlorine pesticides (OCPs) may have been historically applied to soil around the vicinity of the buildings.

- Based on historical records, a former rifle range was located at the northwest corner of the Site, in the areas of the current Cheviot Hills Continuing School. Due to its historical usage, shallow soils may contain lead and/or other metals. This area was not included in the Site redevelopment plans and therefore was not investigated during this PEA-E.

- Historical Site plans from 1944 indicated that a former cesspool was located at the southeast of the corner of the Site, south of the humanities classroom building. Due to historical laboratory classrooms, it is possible chemicals may have been released into the cesspool impacting the subsurface in the area.

- Based on historical records, a spray booth and incinerator were located in the southern side of the former shop building. Due to the nature of the operations; paints automotive chemicals and/or fuels may have impacted the surrounding subsurface.

- Below-grade hydraulic lifts, parts washier, oil drain and moist pits were formerly located in the auto area, and finish rooms were located in the metal shop area and wood shop area of the industrial arts building based on historical Site plans from 1966. According to facility personnel,

these features were removed from the Site in April 2017, however no documentation was available regarding their removal. It is possible that PCB-containing hydraulic fluid from the lifts and chemicals associated with automotive repair may have affected the subsurface in these areas.

- Based on historical records, numerous historical Site structures were located throughout the Site prior to the 1960s, including three larger former buildings and thirty-six former smaller structures. Based on the age of the former buildings, LBP may have been used and may be present in surrounding shallow soils. Also, based on historical practices OCPs may have been applied to soils at or in the vicinity of historical structures.

- Former street extensions were historically located on the southern to central portions of the Site, including Durango Avenue, Livonia Avenue, Ivy Street and Kincardine Avenue. Historical Site plans dated 1944 noted “rock and oil paving” on Kincardine Avenue. The former on-Site presence of streets creates the potential of automotive related chemicals and/or metal compounds due to the use of former leaded gasoline and wear of tires. It is possible that soil in the vicinity of the former streets may be impacted.

- Distribution Station 20 operated by the Los Angeles Department of Water and Power, is located immediately adjacent to the western portion of the Site and has operated since at least 1933. Due to the nature of historical operation, it is likely that electrical equipment containing PCBs may have impacted the subsurface.

- A dry cleaner facility, Fancy Cleaners is located immediately adjacent to the northeast of the Site and has operated from at least 1951 to present. During previous investigations of the former Pierce Auto Station, PCE and TCE was detected in groundwater monitoring wells. According to hazardous waste disposal operations, Fancy Cleaners has document current and historical operations using chlorinated solvents through 2001. Due to the length and nature of its operation and likely impact to the subsurface, chlorinated solvents may have migrated to impact the Site and/or create a vapor intrusion concern.

- Multiple current or former service stations were located immediately adjacent to the east and northeast of the Site. No additional information, such as subsurface investigations or closure data, was available for review. A limited soil vapor investigation was conducted in 2001 over a small portion of the Site, following guidance and reporting limits applicable at the time of the investigation. Due to the nature and length of the historical operations, total petroluem hydrocarbons (TPH) as gasoline and benzene may have impacted the subsurface and migrated to potentially impact the Site.

PCBs were used widely in caulking and elastic sealant materials, particularly from 1950 through the 1970s until PCBs were banned in 1979 (United States Environmental Protection Agency [USEPA] 2015). PCBs may exist in soil near exterior caulking present in buildings meeting the age criteria and adjacent to unpaved areas (DTSC 2006b). PCBs in shallow soil are commonly evaluated at the PEA-E stage of assessment at school sites that meet the age criteria. Although not identified as a REC by Roux,

screening for PCBs was conservatively included in the PEA-E for select samples, as specified in the PEA-E Proposed Sampling Summary (Roux 2018).

The PEA-E study followed a modified sampling plan prepared by Roux in April 2018, as modified by input from the OEHS (OEHS 2018). The PEA-E study was limited to sampling of soil at the Site for contaminants of potential concern, including Title 22 metals (primarily arsenic and lead), volatile organic compounds (VOCs), TPH as gasoline, diesel, and oil (TPH-g/d/o), semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), PCBs, and OCPs in general accordance with typical DTSC guidance for school sites; and to sampling of soil vapor at the Site for VOCs.

2.0 SAMPLING ACTIVITIES

Field sampling activities for the PEA-E study were conducted between August 2018 and November 2019. Field activities included sampling of shallow and deep soil samples for chemicals of potential concern (COPCs) throughout the property in support of the Alexander Hamilton High School Modernization Project. Additionally, soil vapor probes were installed to assess volatile constituents in soil vapor that may be present due to historical uses and potential off-Site sources. Figure 2 present a Site layout showing soil sample and soil vapor probe locations. Large scale maps showing the locations of step-out samples are presented as Figure 3a through 3i. Boring logs are included as Appendix A. A photograph log of representative activities completed during the PEA-E study is included as Appendix B.

Field activities were performed on the following dates: August 30 and 31, September 10, 12 and 19, and October 20 of 2018, and February 18, June 10 to 14, August 12, 14 and 16, and November 23, 25, and 26 of 2019. A total of 116 primary borings and 64 step-out borings were advanced. Boring SV54, originally proposed to be advanced to the west of the Photo Lab, was moved approximately 40 feet to the northwest to avoid a utility corridor (Figure 2). Borings were advanced using hand auger and direct push drilling methods. Soil vapor probes were constructed in 37 of the borings. Soil samples were collected from depths ranging from 0.5 feet bgs to 30 feet bgs and analyzed for lead, arsenic, remaining Title 22 metals, OCPs, VOCs, TPH-g/d/o, PCBs, PAHs, SVOCs, and/or dioxin/furans as listed in the sample matrix included as Table 1. Soil vapor samples were collected from depths ranging between 5 and 25 feet bgs and analyzed for VOCs and/or oxygenates. Soil analytical results are tabulated in Tables 2 through 6. Soil vapor analytical results are shown in Table 7. Laboratory analytical results for soil and soil vapor samples are included in Appendix C.

On February 28, 2019, a total of nine soil borings were advanced to collect soil samples throughout the Site for use in calculating a Site-specific background arsenic concentration. Soil samples were typically collected every five feet until approximately 30 feet bgs. The background arsenic concentration calculation is discussed in Section 4.1.

Additional soil borings were advanced in June, August, and November 2019 for the purposes of further assessing the extent of soil or soil vapor above screening levels. Borings were stepped out from the original sample location in three or four directions, as access and utility corridors allowed, and samples were labeled using the primary boring number plus a letter designation ("A" to the north and continuing in a clockwise direction). Locations requiring additional stepouts beyond the first step-out location were labeled by adding a second "A" (or appropriate letter) to the sample name. Step-out sampling was completed if a result was below the chemical-specific screening level or if a utility corridor or other access restriction such as a building was encountered. Large scale maps showing the step-out boring locations are included as Figures 3a to 3i.

Based on correspondence with OEHS, the following items identified in the Updated PEA-E Proposed Sampling Summary (Roux 2018) are outside the planned area of development or could not be assessed prior to building demolition. Samples were not collected in these areas.

- The Boys Gym will not be removed, therefore proposed borings B33 through B40 were not advanced.
- The former rifle range was located in the present location of the Cheviot Hills Continuing School. This area will not be redeveloped, therefore the proposed borings B75 through B78 were not advanced.
- Interior samples B87 in the Girls' Gym boiler room, B88 adjacent to the Humanities Classrooms elevator, and B89 adjacent to the Laboratory Classrooms elevator were not advanced. It was not feasible to advance the boring inside the boiler room, and the two borings adjacent to the elevators should be assessed after building demolition.

Sampling activities are described further below.

2.1 Objectives

Phase I ESA items identified required further evaluation to determine whether environmental issues need to be mitigated either prior to or during upcoming construction (Roux 2018; OEHS 2018). The primary objectives of this PEA-E were:

- To screen shallow soil at the Site for COPCs, including arsenic, lead, PCBs and OCPs in general accordance with typical DTSC guidance for school sites;
- To evaluate the Site health risk based on soil results for COPCs, including lead, arsenic, OCPs, PCBs, TPH, VOCs and SVOCs; and
- To screen soil vapor at the Site for VOCs in the vicinity near potential off-Site and on-Site sources of VOCs.

Specific objectives for each boring location are listed in Table 1 of the PEA-E Proposed Sampling Summary (Roux 2018).

2.2 Pre-Field Activities - Health and Safety Plan and Utility Clearance

This section describes work performed prior to commencement of the field investigation.

Terraphase prepared a project Health and Safety Plan (HASP) which established Site-specific health and safety protocols implemented by Terraphase staff during field activities. The HASP detailed the personal protective equipment (PPE) required for the work. Health and safety meetings were conducted in the field at the start of the project and each day before fieldwork began. A copy of the HASP was kept onsite during field activities.

Prior to Site work, Terraphase marked the Site boundaries with white marking paint and contacted Underground Service Alert (USA) for marking subsurface utilities in and around the Site at least two working days in advance of field sampling. For the field activities, USA issued ticket numbers A182401321-00A, A182921076-01A, A183191379-00A, A190421583-00A, B191560155-00B and

B192190354-00B, B192190360-00B, and B193240606 prior to Site work. Prior to Site work, private utility locators, either Pacific Coast Locators of La Crescenta, California or Spectrum Geophysics of Chatsworth, California, were contracted to identify underground utilities in the vicinity of each boring location. When necessary, select boring locations were adjusted to avoid conflicts with identified subsurface utilities.

Permits from the Los Angeles County Department of Public Health, Environmental Health were required for deeper soil borings performed on February 18, 2010. Permit SR0174608 was issued by the Department of Public Health for nine soil borings to a depth of approximately 30 ft. A copy of the permit is included in Appendix D.

2.3 Field Procedures – Soil Sampling and Soil Vapor Probe Installation

Following utility clearance, Terraphase subcontracted with Strongarm Environmental Field Services (Strongarm) to core asphalt or concrete and advance borings at locations shown on Figures 2 and 3a to 3i. Shallow soil borings were advanced using a hand auger. Soil borings were advanced deeper than 5 feet bgs using a DPT drill rig equipped with a dual tube continuous sampling system to depths ranging between 15 and 30 feet bgs. A continuous core of soil was collected at each boring location for lithologic logging and soil sample collection for laboratory analysis. Soil cores collected using the DPT rig were collected into acetate sleeves.

The lithology of the soil was described using the Unified Soil Classification System (USCS), for guidance, by Terraphase field staff working under the direction of a California Professional Geologist and recorded onto the soil boring logs. The soil was screened in the field for visual or olfactory indications of chemical impacts. Soil boring logs are presented in Appendix A.

Soil samples were collected at discrete depths at intervals outlined in Table 1. Soil sampling depths ranged from approximately 0.5 feet bgs to 30 feet bgs. Soil samples were collected in appropriate laboratory provided glassware. Soil samples were properly labeled, logged on chain-of-custody forms, placed in an ice chilled cooler, and relinquished to a courier or delivered by field staff under standard chain-of-custody protocol to either SunStar Laboratories (SunStar), located in Lake Forest, California, or Enthalpy Analytical, LLC (Enthalpy) located in Orange, California, both California-certified laboratories. Soil samples and equipment blanks collected in 2018 were analyzed by SunStar; soil samples and equipment blanks collected in 2019 were analyzed by Enthalpy. Borings advanced for the purpose of collecting shallow soil samples (up to 2.5 feet bgs) were backfilled with clean sand and patched to match surrounding surface conditions.

Following the advancement of soil borings, temporary soil vapor probes were installed at select borings at approximately 5 and 15 feet bgs to facilitate collection of soil vapor samples for laboratory analysis. Each soil-vapor sample location except for SV-04 consisted of one shallow and one deep sample. A one-inch long stainless steel soil-vapor sampling probe tip connected to ¼-inch Teflon tubing extending to the ground surface with a valve at the end. Deep sample probes were installed at approximately 15 feet bgs and shallow samples probes were installed at approximately 5 feet bgs. The boring was advanced at least 6 inches deeper than deep sample probe depth (or backfilled to this depth) and filled with sand up to the depth of the probe (i.e. from approximately 15.5 to 15 feet bgs). The deep soil vapor probe was

lowered into the boring and sand was added to a depth of 6 inches above the probe. The sand pack was topped with a transition seal of six inches of dry bentonite followed by hydrated bentonite. The boring was backfilled up to 5.5 feet bgs, then 6 inches of sand was placed up to the depth of the shallow probe. The shallow probe was lowered into the boring and sand added to a depth of 6 inches above the probe. The sand pack was topped with a transition seal of six inches of dry bentonite followed by hydrated bentonite. The boring was backfilled to the surface.

Following the appropriate equilibration period, soil vapor samples were collected in accordance with the Advisory Active Soil Gas Investigations (Soil Gas Advisory), prepared by California Environmental Protection Agency (Cal/EPA), DTSC, Los Angeles Regional Water Quality Control Board (RWQCB), and San Francisco RWQCB and last revised July 2015. Soil vapor samples were analyzed either using EPA Method 8260SV by a mobile lab or using EPA Method TO-15 by a fixed base lab. Soil vapor samples collected from 2018 to August 2019 were analyzed by Jones Environmental (Jones) of Santa Fe Springs, California; soil vapor samples collected in November 2019 were analyzed by H&P Mobile Geochemistry (H&P) of Carlsbad, California. After soil vapor sampling, probes were abandoned and patched to match surrounding surface conditions.

Reusable sampling equipment (e.g., hand auger bucket, drilling equipment) was decontaminated prior to sample collection and between boreholes. Decontamination procedures included removal of visible soil, followed by a rinse with non-phosphate detergent and tap water, rinse with tap water, and last rinse with deionized/distilled water.

2.4 Laboratory Analyses and Quality Control

The soil samples were analyzed as shown in Table 1. SunStar and Enthalpy analyzed select soil samples for arsenic and lead using USEPA Method 6020, OCPs using USEPA Method 8081A, PCBs using USEPA Method 8082, TPH-g/d/o using USEPA Method 8015M, Title 22 Metals using USEPA 6010B/7471A series, VOCs using USEPA Method 8260B, SVOCs using USEPA Method 8270C, and PAHs using USEPA Method 8270C SIM. In general, if a sample was analyzed for all Title 22 Metals using USEPA Method 6010B, arsenic and/or lead were not analyzed separately by USEPA Method 6020. Where the Total Threshold Limit Concentration (TTLC) lead or arsenic result was greater than 50 milligrams per kilogram (mg/kg), samples were further analyzed for lead or arsenic using the Waste Extraction Test (WET) preparation for Soluble Threshold Limit Concentration (STLC) and/or the toxicity characteristic leaching procedure (TCLP).

Field quality control samples included field duplicates (10%) and equipment blanks. The equipment blank was collected by pouring distilled water over the decontaminated hand auger bucket or direct-push drilling shoe and collecting the poured water in laboratory supplied sample containers. Field duplicates were analyzed similar to the original sample to maintain the required ratio of approximately one duplicate sample for every 10 field samples analyzed. The equipment blank samples were analyzed for the COPCs that were sampled for that day. The laboratory data package also included standard quality control for method blanks, matrix spike/ duplicates, surrogate recoveries, and laboratory control

samples/duplicates, as specified by the individual methods. The laboratory also assigned laboratory data qualifiers to data, as appropriate and in accordance with the individual methods.

Soil vapor samples were analyzed for VOCs using USEPA Method 8260SV or using USEPA Method TO-15. Quality control samples included field duplicates (10%) and method replicates (10%), if primary soil vapor samples were analyzed using USEPA Method 8260SV. In this case, replicate samples were also analyzed using USEPA Method TO-15. The laboratory data package also included standard quality control for method blanks, matrix spike/ duplicates, surrogate recoveries, and laboratory control samples/duplicates, as specified by the individual methods. The laboratory also assigned laboratory data qualifiers to data, as appropriate and in accordance with the individual methods.

Data validation was performed in accordance with the National Functional Guidelines for Superfund Organic Methods Data Review, (January 2017; USEPA-540-R-2017-002) and the National Functional Guidelines for Superfund Inorganic Methods Data Review, (January 2017; USEPA-540-R-2017-001), following the format used in the DTSC Data Validation Memorandum dated May 2, 2006, prepared for the Advanced Technology Laboratory Report ATV5976. The data validation memorandum (DVM) prepared for this investigation is included as Appendix E. As described in the DVM, field duplicate sample results were similar to original samples, as shown in Tables 2 through 7. All samples were analyzed as planned, with the exception of those noted in Section 2.0. Results for all equipment blanks were reported below the detection level for all compounds analyzed. Results for method blanks, surrogates and duplicate samples as required by the USEPA method appear acceptable. The data, as qualified, appears acceptable for the purposes of this PEA-E.

2.5 Abandonment of Soil Borings and Site Restoration

Following sample collection, shallow soil borings were backfilled with clean sand and tamped as specified by OEHS personnel. Soil vapor probes were destroyed by removing the probe tubing and patching with concrete. Borings completed under permit SR0174608 were abandoned by backfilling with bentonite cement grout using a tremie pipe. All borings were completed at the surface to match existing grade.

2.6 Investigative Derived Waste (IDW) Management

All personal protective equipment, surface cores, and miscellaneous materials used to complete the scope of work were properly disposed of according to applicable regulations in a municipal dumpster.

Six 55-gallon Department of Transportation approved drum containing soil cuttings and decontamination water were generated and temporarily stored onsite, pending characterization, profiling and lawful off-Site disposal. Two soil disposal profiles were generated for the Site, one from soil sampled November 2018 and one from soil sampled in January 2020.For waste characterization purposes, composite samples of drummed soil were collected and transported to Enthalpy for analysis of total petroleum hydrocarbons (gasoline, diesel, and motor oil ranges) using USEPA Method 8015M, Title 22 metals using USEPA Method 6010B/7471A, OCPs using USEPA Method 8081A, PCBs using USEPA Method 8082, and VOCs using USEPA Method 8260B. All soil was characterized as non-hazardous. Two

drums were removed from the Site on June 10, 2019, and transported to Soil Safe in Adelanto, California. Four additional drums were removed from the Site on February 19, 2020, and also transported to Soil Safe in Adelanto, California. Disposal Manifests are included as Appendix F.

3.0 RESULTS

The following sections summarize results for the soil and soil vapor sampling conducted at the Site between August 31, 2018 and November 26, 2019. Boring locations are shown on Figures 2 and 3a to 3i. Soil analytical results are presented in Tables 2 through 6, and laboratory analytical reports and chain-of-custody documentation are presented in Appendix C.

3.1 Lithology

To facilitate soil sampling during the PEA-E study, 128 shallow soil borings were advanced to a maximum depth of 2.5 feet bgs, and 52 soil borings were advanced to a maximum depth of 30 feet bgs (Appendix A). Groundwater was not encountered in the soil borings during the PEA-E study.

Shallow soil borings were typically advanced in paved areas with approximately 3 inches of asphalt or concrete at the surface. Where possible, borings were advanced in unpaved or athletic field areas. Soil type observed to 5 feet bgs (Appendix A) generally consisted of fine -grained soils of predominantly silt or clay. Between approximately 5 and 20 feet bgs, soil type generally consisted of sandy fine-grained soils or silty sand. A gravelly sand layer first encountered at depths between 18 and 22 feet bgs extended across most of the Site where borings were advanced to this depth.

3.2 Soil Analytical Results

Laboratory results for soil samples are summarized in Tables 2 through 5, and boring locations are shown on Figures 2 and 3a through 3i.

3.2.1 Soil Screening Levels

Soil analytical results are compared to the following Site-specific action levels (SSALs):

- Arsenic – A Site-specific background arsenic concentration was calculated for the Site using the Arsenic Strategies guidance (DTSC 2009). The SSAL for arsenic was calculated to be 28 mg/kg. The derivation of this background value is described in Section 4.1 and Appendix G.
- Lead - 95% upper confidence limit is at or below 80 mg/kg and analyses indicate that the TTLC results are below 1,000 mg/kg and the STLC (WET) results are below 5 mg/L.
- OCPs, VOC, SVOCs, PCBs, and Title 22 metals excluding lead and arsenic – DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3, DSTC-modified Screening Levels (DTSC 2019), or if the compound is not listed, USEPA Region 9 RSL for residential soil (EPA 2019) for each individual compound detected.
- TPH – LAUSD Environmental Import/Export Materials Testing screening level of 100 mg/kg for gasoline-range hydrobarbons and 1,000 mg/kg for diesel/oil-range hydrocarbons (LAUSD 01 4524 Specification).

3.2.2 Arsenic

Arsenic was reported above the method detection limit (MDL) in 421 samples of 430 samples analyzed at concentrations ranging between 1.297 mg/kg (B97 at 0.5 ft bgs) and 155 mg/kg (B57D at 15.0 feet bgs). The DTSC-adopted background arsenic concentration is 12/kg (DTSC, 2008). A Site-specific background arsenic concentration was calculated for the Site to be 28 mg/kg (Section 4.1 and Appendix G). A total of 22 samples exceeded the Site-specific background value of 28 mg/kg. A summary of soil sample analytical data for arsenic is summarized in Table 2.

3.2.3 Lead

Lead was reported above the MDL in 327 samples of 353 samples analyzed at concentrations ranging between 3.3 mg/kg (B67 sample at 2.5 feet bgs) and 1,030 mg/kg (B12-BBB at 0.5 feet bgs). The DTSC-modified screening level for lead is 80 mg/kg (screening level for use in human health risk assessments) (DTSC 2019). Twenty of the samples analyzed exceeded the DTSC-SL of 80 mg/kg (Table 2).

3.2.4 Other Metals

Cobalt was reported above the MDL in all 99 samples analyzed at concentrations ranging between 2.92 mg/kg (B70A at 0.5 feet bgs) and 31 mg/kg (B53 at 10 feet bgs). The USEPA RSL for cobalt is 23 mg/kg (USEPA 2019). Seven of the samples were equal to or exceeded the USEPA RSL of 23 mg/kg. The four samples with concentrations that exceeded the RSL also contained arsenic concentrations over the Site-specific background concentration. Soil metals results are presented in Table 2.

Thallium was reported above the MDL in 16 samples. All detections were reported as estimated concentrations, as they were detected between the MDL and and reporting limit. All estimated concentrations were above the USEPA RSL of 0.78 mg/kg for thallium.

3.2.5 PCBs

A total of 35 soil samples, approximately 10% of all soil samples, were selected for PCB analysis. No PCBs were detected above their respective MDLs in soil samples analyzed. Analytical results are shown in Table 3.

3.2.6 OCPs

OCPs were detected above their respective MDLs in thirty-five (35) of the samples analyzed for OCPs. OCPs detected include: 4,4'-Dichlorodiphenyldichloroethane (4,4'-DDD), 4,4-Dichlorodiphenyldichloroethylene (4,4'-DDE), 4,4'-Dichlorodiphenyltrichloroethane (4,4'-DDT), gamma-hexachlorocyclohexane (g-BHC or "Lindane"), chlordane, Dieldrin and Heptachlor epoxide. All concentrations were below the USEPA RSLs for the individual compounds. Analytical results are shown in Table 3.

3.2.7 TPH

Samples from select borings were analyzed for TPH quantified as gasoline, diesel, and oil as summarized in Table 4. TPH-gasoline was not detected in any of the samples analyzed. Low level detections of TPH-diesel and TPH-motor oil in samples included:

- TPH-diesel was only detected in boring B99 at 0.5 feet bgs at a concentration of 11 mg/kg. The detection was below the LAUSD Environmental Import/Export Materials Testing (LAUSD 01 4524 Specification) screening level of 1,000 mg/kg for diesel and is considered relatively low.
- TPH-motor oil was detected in four samples at concentrations ranging from 14 mg/kg (B53 at 5.0 feet bgs) to 64 mg/kg (B46 at 0.5 feet bgs). The detection was below the LAUSD Environmental Import/Export Materials Testing (LAUSD 01 4524 Specification) screening level of 1,000 mg/kg for oil and is considered relatively low.

3.2.8 VOCs

Samples from select borings across the Site and near the photography classroom were analyzed for VOCs in consultation with OEHS, as summarized in Table 4. Low levels of fourteen VOCs were detected in one or more of the samples analyzed; however, all detections of VOCs were below their respective SSALs, as summarized in Table 4. Low level detections of VOCs included:

- 1,2,4-trimethylbenzene was detected in three samples at concentrations ranging from 0.00025 mg/kg (B85 at 1.5 feet bgs) to 0.00054 mg/kg (B86 at 0.5 feet bgs).
- Acetone was detected in ten samples at concentrations ranging from 0.051 mg/kg (B85 at 2.5 feet bgs) to 0.28 mg/kg (B85 at 0.5 feet bgs). These detections are well below the USEPA RSL of 61,000 mg/kg.
- Benzene was detected in 31 samples at concentrations ranging from 0.00015 J mg/kg (SV117 at 25 feet bgs) to 0.0016 mg/kg (B85 at 0.5 feet bgs). These detections are below the DTSC SL of 0.33 mg/kg.
- n-propylbenzene was only detected in B62 at 10 feet bgs at a concentration of 0.0054 mg/kg. This result is below the USEPA RSL of 3,800 mg/kg.
- p-isopropyltoluene was only detected in B62 at 10 feet bgs at a concentration of 0.0045 mg/kg. No RSLs currently exist for this constituent.
- Toluene was detected in 29 samples at concentrations ranging from 0.00013 J mg/kg in SV117 at 15 ft bgs to 0.009 mg/kg (SV62 at 10 ft bgs. These results are below the DTSC SL of 1,100 mg/kg.
- Total xylenes were detected in 7 samples at concentrations ranging from 0.0084 mg/kg in B85 at 2.5 ft bgs to 0.00226 mg/kg in B85 at 0.5 ft bgs.
- Remaining VOCs analyzed were not detected at or above their respective MDLs.

3.2.9 SVOCs

SVOCs were not detected at or above their respective MDLs in any of the six samples analyzed. A summary of MDLs can be found in Table 5.

3.2.10 PAHs

PAHs were not detected at or above the MDL in the six samples analyzed from select borings (Table 5).

3.2.11 Dioxin/Furans

Dioxin/furans were analyzed in three soil samples. All detections were below the instrument calibration range.

3.2.12 Leaching Analyses

Select soil samples with metals concentrations over 50 mg/kg were extracted using the STLC (WET) test procedure or the TCLP, and the leachate was analyzed for lead or arsenic using USEPA Method 6010B. Analytical results, including both the primary soil results and the corresponding results from the STLC and TCLP prep methods, are listed in Table 6.

Arsenic: Two samples (B11-DDD-1.5 and B18-2.5) were extracted using the STLC (WET) test procedure and the leachate was analyzed for arsenic using USEPA Method 6010B. One of these samples (B11-DDD-1.5) was also extracted using the TCLP and the leachate was also analyzed for arsenic. All results were less than 5 mg/L, both the TCLP and STLC regulatory limit for arsenic.

Lead: Six samples were extracted using the STLC (WET) test procedure and the leachate was analyzed for lead using USEPA Method 6010B. Resulting STLC-lead results were between less than the reporting limit of 0.1 mg/L (B91 at 1.5 feet bgs) to 83 mg/L (B12-BBB at 0.5 feet bgs). Only samples B12-0.5 and B-12-BBB-0.5 exceeded the 5 mg/L threshold. As a result, B12-BBB at 0.5 feet bgs was extracted using the TCLP, and the leachate was analyzed for lead using USEPA Method 6010B. The concentration for TCLP-lead in sample B12-BBB-0.5 was 5.09 mg/L. This concentration is above the TCLP regulatory limit of 5 mg/L for lead and is therefore representative of hazardous material under federal waste disposal regulations.

3.3 Soil Vapor Analytical Results

A total of 91 soil vapor samples were analyzed for VOCs at the Site. Soil vapor results were compared to the DTSC-SL or USEPA RSL for resident air, modified by an attenuation factor of 0.002. Six of the VOCs exceeded their respective DTSC-SL or USEPA RSL including 1,2-dichloroethane, 1,3-butadiene, benzene, ethylbenzene, naphthalene, and tetrachloroethene. Soil vapor analytical results are presented in Table 7.

- 1,2-dichloroethane was only detected in sample SV62 at 15 feet bgs at a concentration of 76 micrograms per cubic meter ($\mu g/m^3$). The concentration exceeded the SSAL of 55 $\mu g/m^3$.

- 1,3-butadiene was only detected in sample SV60 at 15 feet bgs at a concentration of 16.9 µg/m^3. The concentration exceeded the SSAL of 8.5 µg/m^3.
- Benzene was detected in 42 samples at concentrations ranging from 1.8 µg/m^3 in SV-114 at 15 ft bgs to 1,080 µg/m^3 in SV55 at 15 ft bgs. Eleven of the detected concentrations exceeded the SSAL of 48.5 µg/m^3. Isoconcentrations of the benzene soil vapor concentrations are shown on Figure 4a (samples collected from 5 feet bgs) and 4b (samples collected deeper than 5 feet bgs).
- Ethylbenzene was detected in 35 samples at concentrations ranging from 2.3 µg/m^3 in B64 at 29 ft bgs to 1,300 µg/m^3 in SV115 at 15 and 25 ft bgs. Four detections exceeded the SSAL of 550 µg/m^3. Isoconcentrations of the ethylebenzene soil vapor concentrations are shown on Figure 5a (samples collected from 5 feet bgs) and 5b (samples collected deeper than 5 feet bgs).
- Naphthalene was detected 6 samples at concentrations ranging from 4.1 µg/m^3 in B64 at 29 ft bgs to 68 µg/m^3 in SV56 at 15 ft bgs. Only one concentration exceeded the SSAL of 41.5 µg/m^3.
- Tetrachloroethene was detected 39 samples at concentrations ranging from 2.4 µg/m^3 in SV116 at 15 ft bgs to 343 µg/m^3 in B4 at 5 ft bgs. Only one concentration exceeded the SSAL of 230 µg/m^3.

4.0 HUMAN HEALTH SCREENING EVALUATION

As part of this PEA-E study, select soil and soil vapor samples were analyzed for arsenic, lead, remaining Title 22 metals, PCBs, OCPs, TPH, VOCs, PAHs, and/or SVOCs, which were the COPCs identified in soil at the Site. Relevant SSALs applicable to the analyses in this PEA-E (OEHS 2018) include:

- Arsenic – a Site-specific background concentration of 28 mg/kg was developed for the Site, as discussed in Section 4.1.
- Lead - 95% upper confidence limit is at or below 80 mg/kg.
- OCPs, VOC, SVOCs, PCBs, and Title 22 metals other than arsenic and lead – DTSC HERO HHRA Note 3, DSTC-modified Screening Levels (DTSC 2019), or if the compound is not listed, USEPA Region 9 RSL for residential soil (USEPA 2019) for each individual compound detected.
- TPH – LAUSD Environmental Import/Export Materials Testing screening level of 100 mg/kg for gasoline and 1,000 mg/kg for diesel/oil (LAUSD 01 4524 Specification).

4.1 Arsenic Concentration Evaluation

Terraphase reviewed the arsenic soil sampling results with consideration for the methodologies presented in CalEPA DTSC's January 2009 Arsenic Strategies Determination of Arsenic Remediation, Development of Arsenic Cleanup Goals (DTSC 2009). Using the guidance, Terraphase calculated an arsenic concentration of 28 mg/kg to be used as a cleanup goal. The following is a brief overview of the analysis performed and the associated results which support this proposed cleanup goal for arsenic. This included performing both a simple graphical determination as well as a statistical determination. The graphical determination resulted in an estimated cleanup goal for arsenic of 25 mg/kg. The statistical determination resulted in an estimated cleanup goal for arsenic of 28 mg/kg. Since both methodologies are supported by the guidance, Terraphase recommended the use of the higher of these two results, 28 mg/kg. LAUSD verbally accepted using 28 mg/kg as the Site-specific background concentration in March 2019.

Further details on how the arsenic background concentration was calculated are included in Appendix G.

4.2 Health Risk Screening Evaluation

Concentrations of various metals above SSALs were reported in Site soils, and concentrations of various VOCs above SSALs were reported in Site soil vapor; therefore, a Human Health Screening Risk Evaluation (HHSRE) was performed and is included as Appendix H. The HHSRE was performed in accordance with the DTSC PEA Guidance Manual (DTSC 2015a).

4.2.1 Soil

Concentrations of arsenic, lead, and cobalt above SSALs were reported in Site soils. All Site soil data was considered in the HHSRE unless noted below. The following assumptions were made in the risk evaluation:

- Locations with arsenic or lead concentrations exceeding the SSALs would be subject to remedial action. In conducting the quantitative risk calculations, these locations were assumed to be remediated (e.g., soil excavated and replaced with clean soil).
- The USEPA RSL for thallium was not used since it is based upon a Provisional Peer-Reviewed Toxicity Value (PPRTV) Appendix (Screening Value) toxicity value. USEPA states that these toxicity values are "*not defensible as the primary drivers in making cleanup decisions because they are based on limited information*" (USEPA 2009, 2012).
- Total chromium concentrations were assumed to be trivalent chromium (Cr III) and not hexavalent chromium (Cr VI), given the lack of a suspected source that could have released Cr VI to the subsurface at the Site.

Upper-bound estimates of single-chemical cancer risk and noncancer hazard quotients (HQ) were calculated and then summed for each location to estimate the upper-bound cumulative cancer risk and noncancer hazard index (HI) at each location.

Assuming soil impacted with soil or arsenic above SSALs is removed, none of the remaining soil at the Site would exhibit concentrations that would result in cumulative risk or HI estimates greater than the risk management goals used by DTSC to determine when risk management action is warranted (DTSC 2015a).

4.2.2 Soil Vapor

Eight soil vapor locations exhibited cumulative cancer risk estimates above the risk management goal of $1x10^{-6}$. Noncancer HI estimates at all soil vapor sampling locations were less than or equal to the risk management goal of 1. The eight locations (B04, B55, B56, B62, B110, B115, B117, and B121) are highlighted on Figure 4 of Appendix H, and are generally located near the Photo Studio and the sewer line leading from the Photo Studio. Other locations are in parking lots, open areas, or adjacent to the Laboratory Classrooms building. Further consideration for vapor intrusion risk management action at these locations is warranted as Site redevelopment plans are finalized. These considerations may include (1) additional sampling and/or further assessment to refine the conservative quantitative risk estimates presented in this evaluation, or (2) remedial action to reduce COPC concentrations in these areas or to eliminate/mitigate vapor intrusion exposure to receptors.

5.0 COMMUNITY PROFILE

Community profile information for the 90034 zip code and participation are described briefly, below.

5.1 Community Demographics

According to the 2018 American Community Survey (data.census.gov), the Demographic Profile for 90034 is:

- Total population: 55,652
- Median Age: 33.7
- Population 18 years and over: 86.7%
- Male: 27,996 (50.3%)
- Female: 27,656 (49.7%)
- Population by race:
    - White: 31,319 (56.3%)
    - Black or African American: 5,565 (10.0%)
    - American Indian and Alaska Native: 161 (0.3%)
    - Asian: 10,929 (19.6%)
    - Native Hawaiian and Pacific Islander: 121 (0.2%)
    - Other: 142 (1.2%)
    - Two or More Races: 2,789 (5.0%)
- Total Households: 27,712
- Average Household Size: 2.00

5.2 Local Participation and Involvement

On August 24, 2018, Terraphase distributed assessment work notices to line of sight neighbors and to the School's administrative counter to provide the community members with information regarding the PEA-E activities. Terraphase also laminated and posted the assessment work notice on the fence at each of the four sides of the Site, and mailed the assessment work notices to the student mailing list provided by LAUSD. English and Spanish translations of the assessment work notice were provided. Field sampling activities for the PEA-E study were conducted during the school holidays or weekends to

minimize disturbance to school activities. Terraphase is not aware of media coverage, specific environmental concerns or issues identified by the community, or off-Site issues in relation to the Site.

This Draft PEA report will undergo a 30 day public review including a public meeting where LAUSD will be available for any questions. The Draft PEA-E Report can be reviewed at the following locations:

- Hamilton High School website: https://hamiltonhs-lausd-ca.schoolloop.com/
- LAUSD OEHS website: http://achieve.lausd.net/CEQA and http://achieve.lausd.net/SiteAssessment
- CEQAnet: https://ceqanet.opr.ca.gov/ (PEA-E as an appendix)

The 30 day public review will start October 15 and end 30 days later. The public meeting is scheduled for October 28, 2020. Any public comments and/or questions will be incorporated in the final PEA report.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The Site is located at Alexander Hamilton High School located at 2959 South Robertson Boulevard in Los Angeles, California (Figures 1 and 2). The primary objectives of this PEA-E were to collect samples of soil at the Site for analysis of COPCs, including arsenic, lead, other Title 22 metals, PCBs, OCPs, TPH, VOCs, SVOCs, PAHs, and/or dioxin/furans in general accordance with typical DTSC guidance for school sites; to screen soil vapor at the Site for COPCs, including VOCs and oxygenates; and to evaluate the Site health risk based on soil and soil vapor results for COPCs.

Shallow soil and soil vapor sample results from the PEA-E survey indicate that select COPCs, including arsenic and lead in soil and benzene and ethylbenzene in soil vapor, are present at concentrations above the SSALs typical of school sites in California. The PEA-E survey results in the vicinity of the Humanities Classrooms, the Photo Studio, the west side of the Laboratory Classrooms, the north side of the Girls' Gym, the west side of portable building (B1, B2), and the north central portion of the Site indicate that elevated levels of arsenic and lead were reported in shallow soil samples analyzed. Conservative estimates of cumulative cancer risk estimates due to vapor intrusion exposure at eight locations were greater than DTSC's recommended risk management goals, and additional assessment and/or remedial action at these locations would is warranted.

Based on these results, Terraphase recommends that a Removal Action Workplan (RAW) be prepared for the target COPCs in shallow soil and soil vapor in the locations referenced above. Large scale figures showing the soil sample locations and recommended excavation boundaries are includes as Figures 6a to 6i. Assuming removal of the arsenic and lead concentrations in soil above SSALs, conservative estimates of cumulative cancer risk and noncancer HI due to direct contact exposure to remaining COPCs in soil would be equal to or below DTSC's risk management goals. As such, additional risk management action to address potential direct contact exposures to soil at the Site would not be warranted. Potential removal or mitigation measures to address cancer risks related to vapor intrusion in Site buildings should also be presented and evaluated in the RAW.

7.0 LIMITATIONS

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services. This report was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry as practiced in California. To the extent that Terraphase relied upon any information prepared by other parties not under contract to Terraphase, no representation as to the accuracy or completeness of such information is made.

The findings presented in this report apply solely to conditions existing at the time of the assessment. It must be recognized that results intended for the purpose of screening or evaluating the Site for potential contamination through limited research and investigative activities may not represent a conclusive or complete characterization.

Terraphase's interpretation of investigation results is related to the availability of the data and the extent of the investigation activities, and Terraphase does not provide any guarantees, certifications, or warranties (express or implied) of conditions in areas not evaluated. Furthermore, nothing contained in this document shall relieve any party of its responsibility to abide by contract documents and all applicable laws, codes, regulations, or standards.

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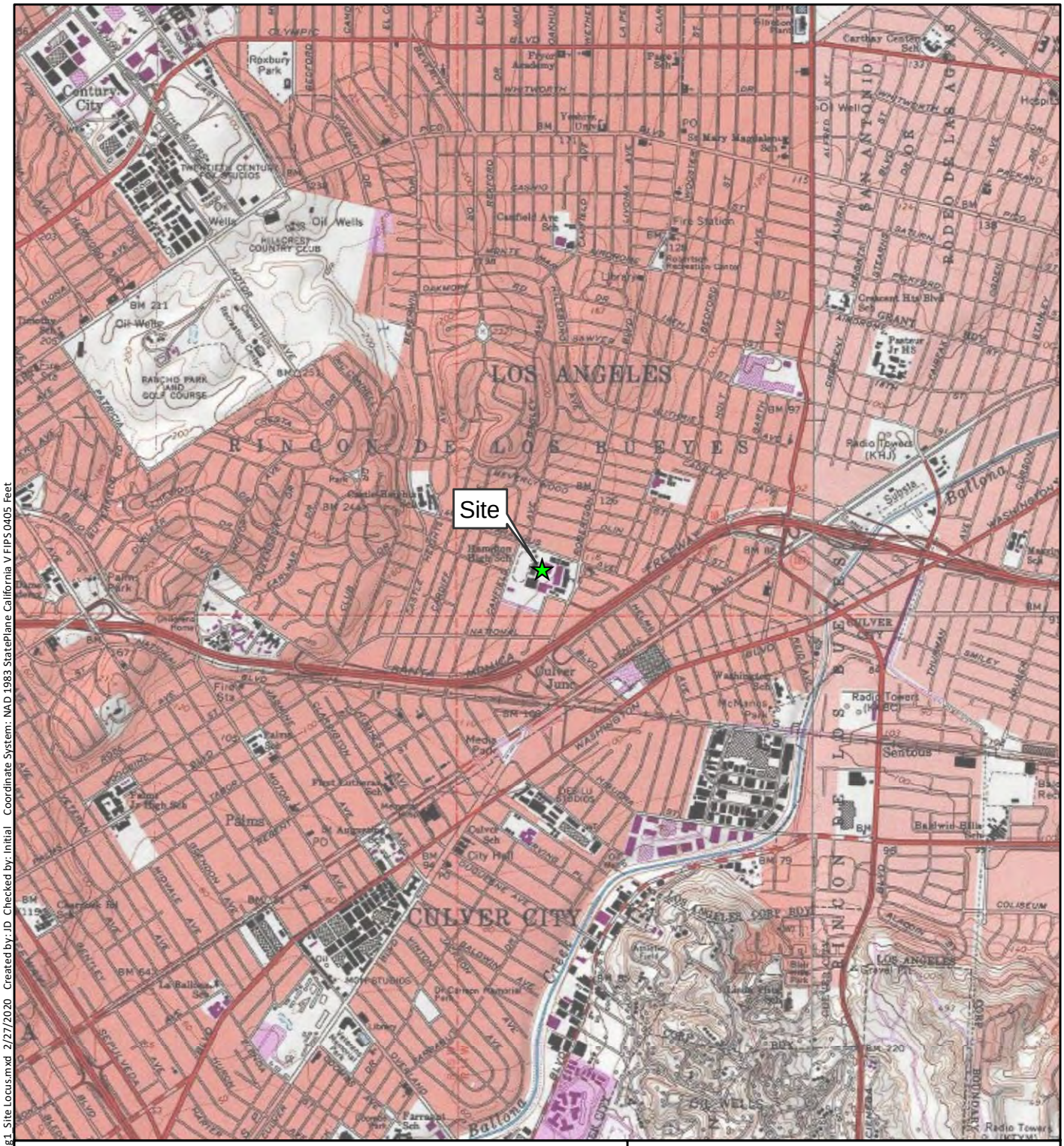
FIGURES



0 2,500 5,000 Feet

1 inch = 2,500 feet

N

Legend

Site Location

Base Map: USGS Beverly Hills, CA 1995 7.5 Minute Quadrangle.

SAFETY FIRST

CLIENT: LAUSD

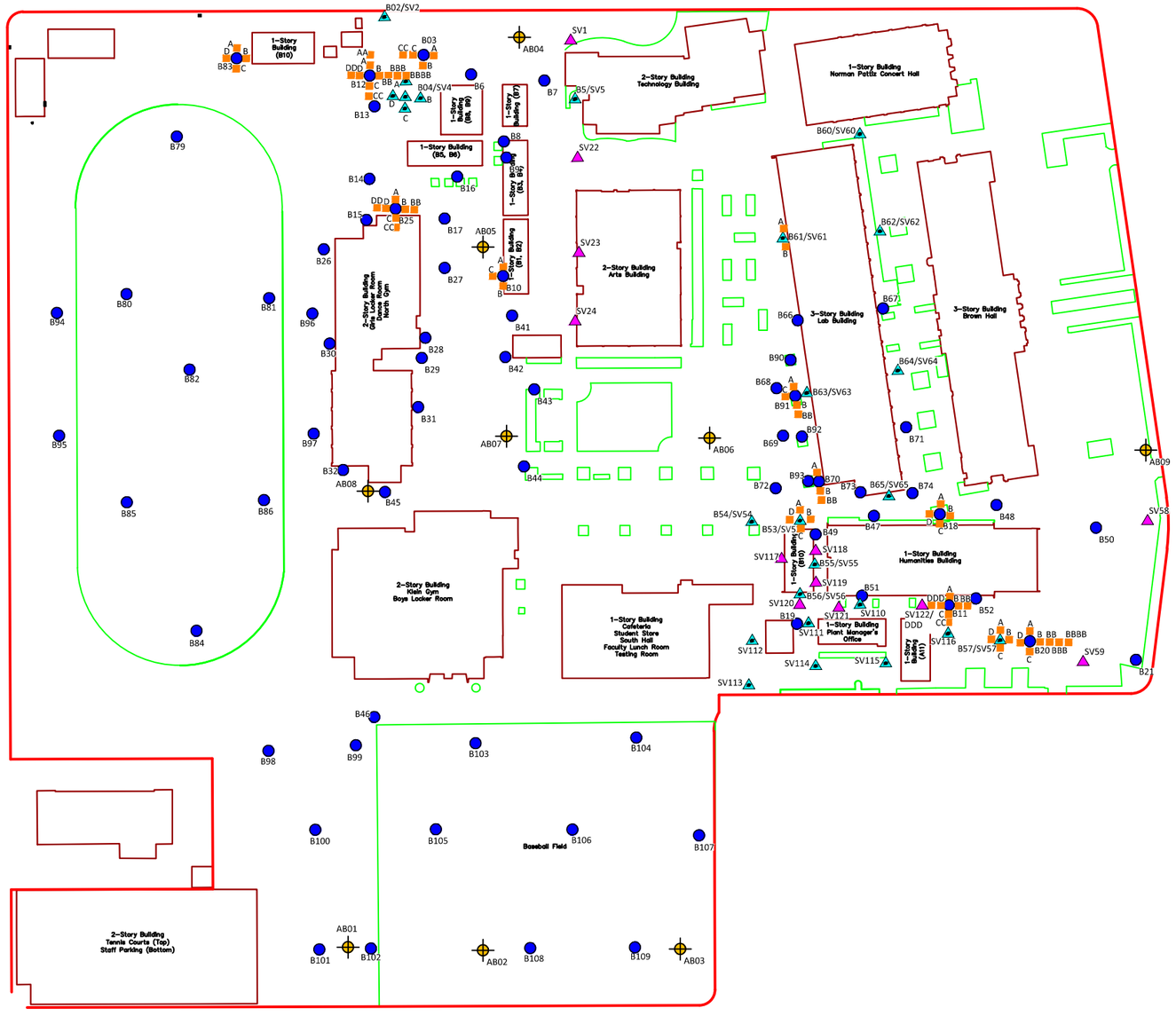
PROJECT: Alexander Hamilton High School
2955 S. Robertson Blvd., Los Angeles, California

PROJECT NUMBER: S030.008.004

Site Location

FIGURE 1

File: N:\GIS\Prj\S030 LAUSD\S030.008\S030.008.004\MXDs\Fig1_Site Locus.mxd 2/27/2020 Created by: JD Checked by: Initial Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet



Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area or Grass

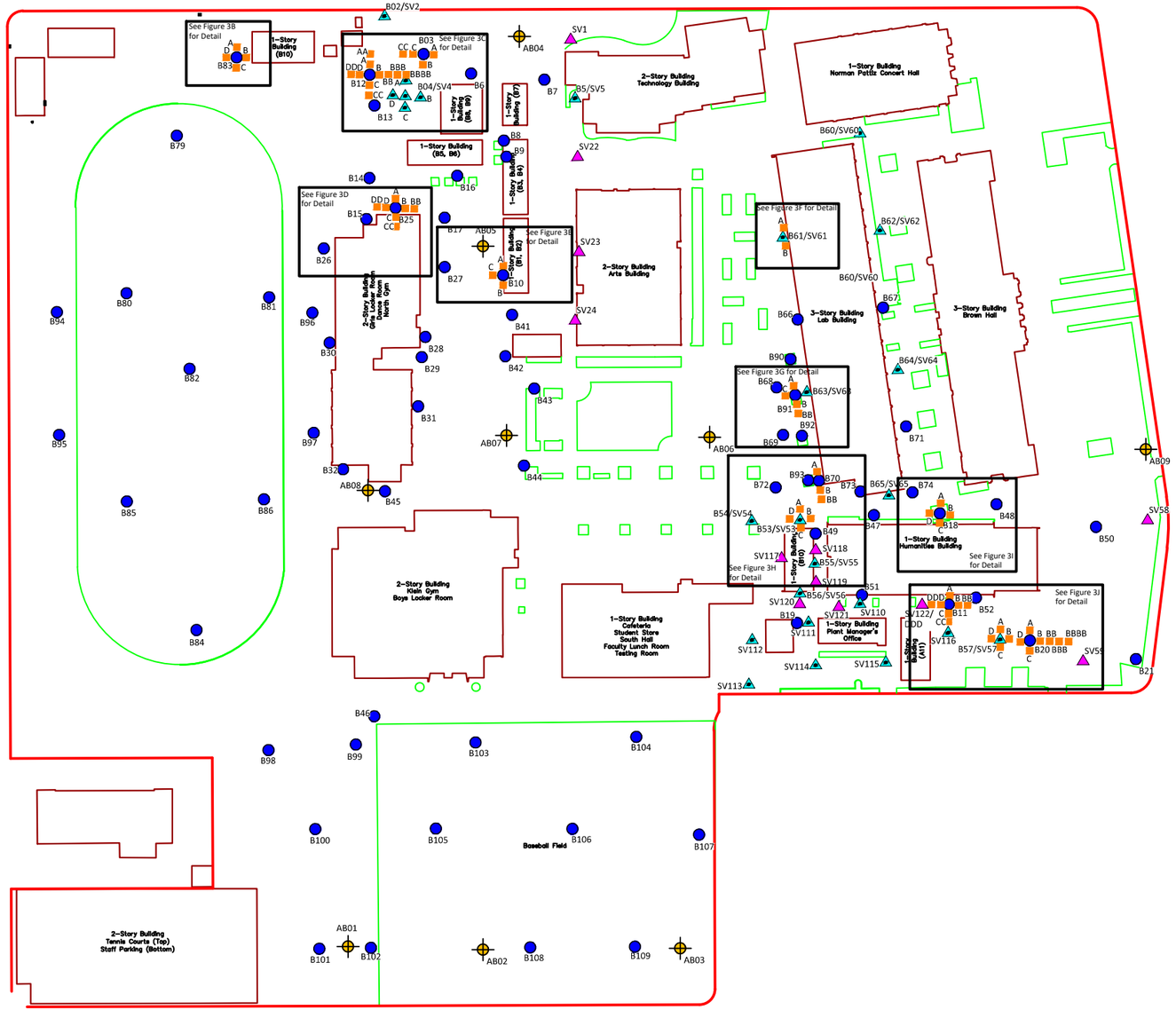
N

0' 65' 130' 260'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Site Plan with Boring Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 2

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Site Plan.dwg Drawn By: DB



Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area or Grass

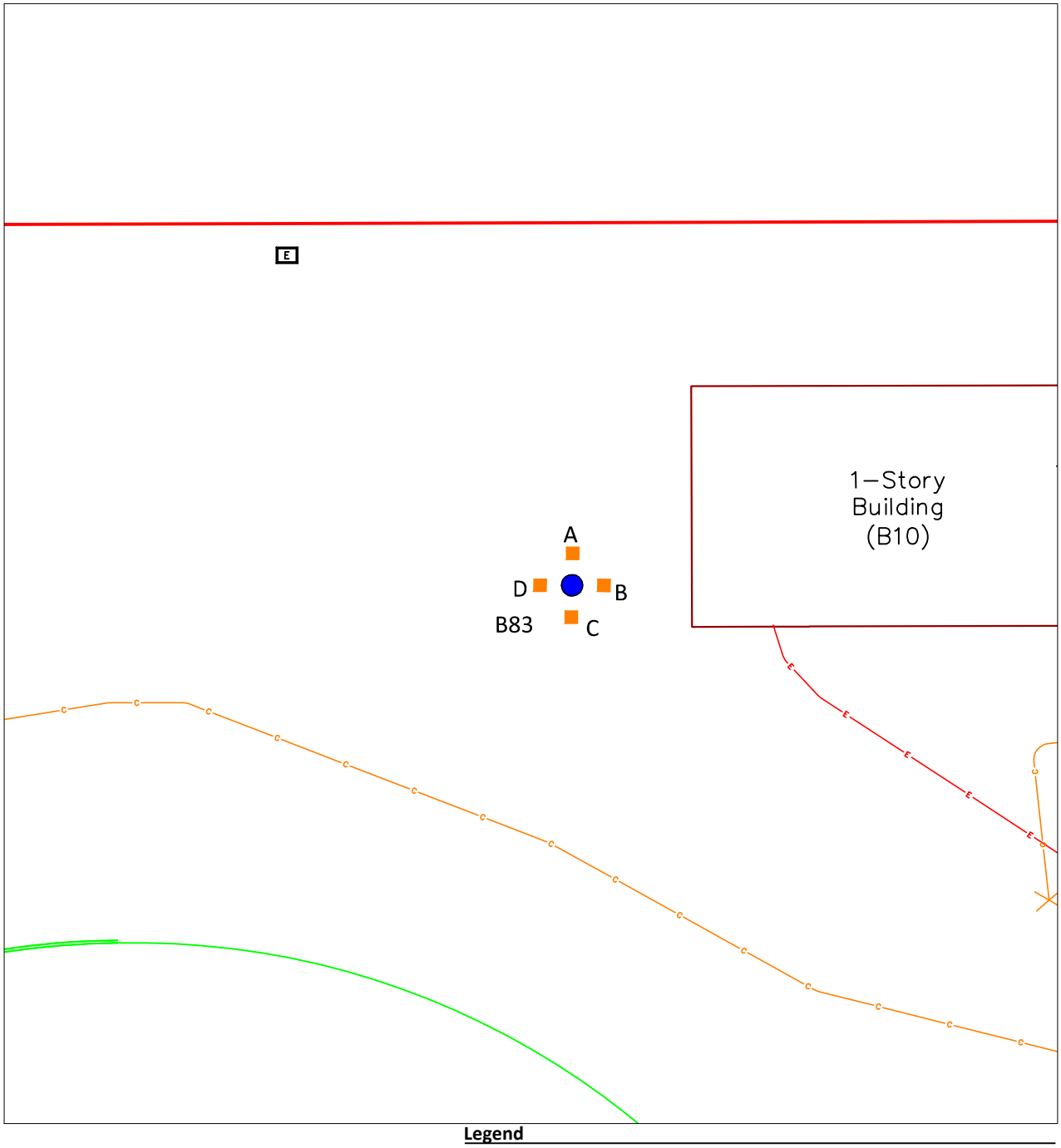
N

0' 65' 130' 260'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Site Index
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3A

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20200309) Index Figure.dwg Drawn By: DB



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Site Boundary
- Building Footprint
- Grass Area
- Electric
- Communication

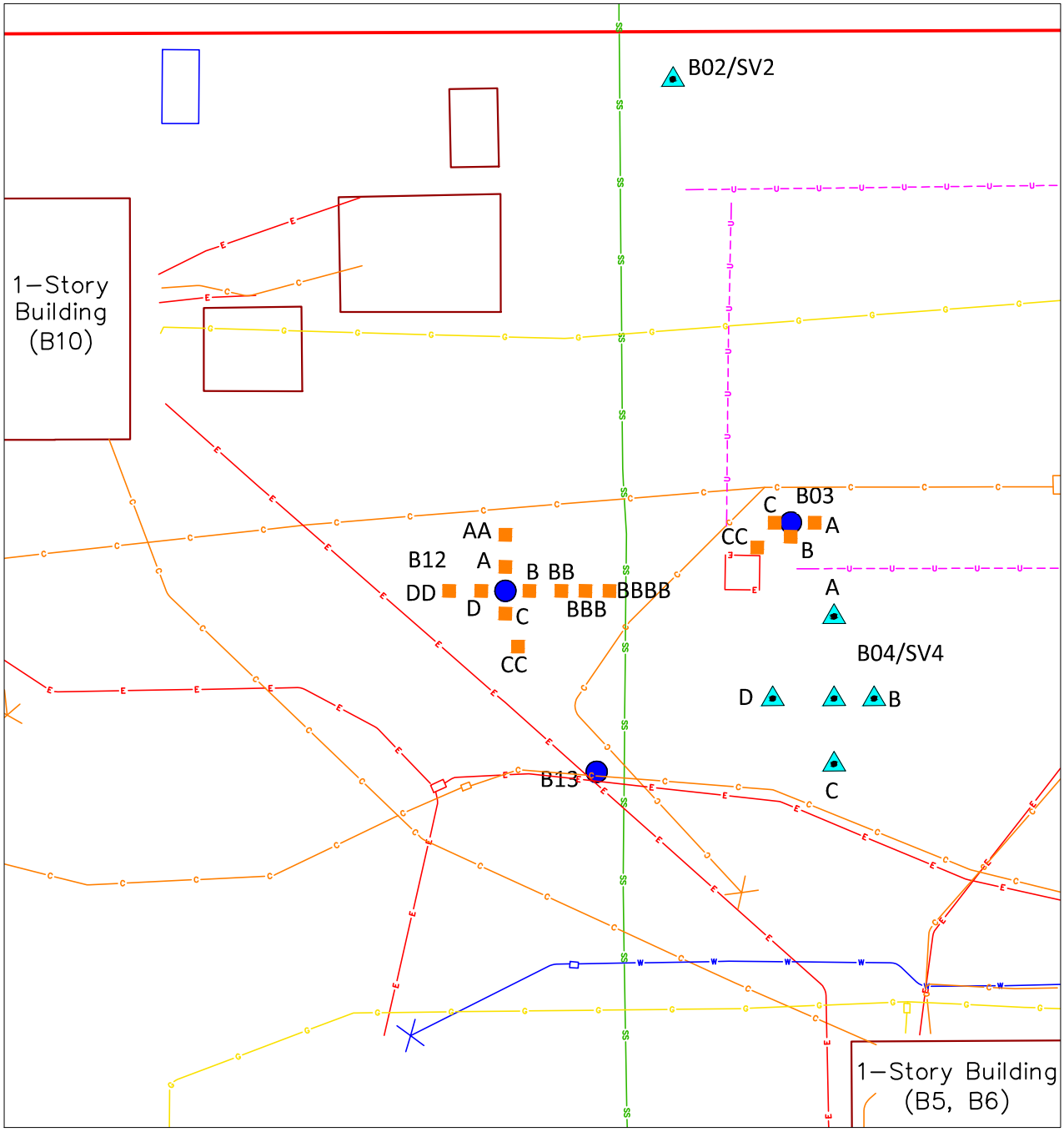
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Boring B83 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3B

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Electric
- Water
- Communication
- Gas
- Sanitary Sewer
- Unknown

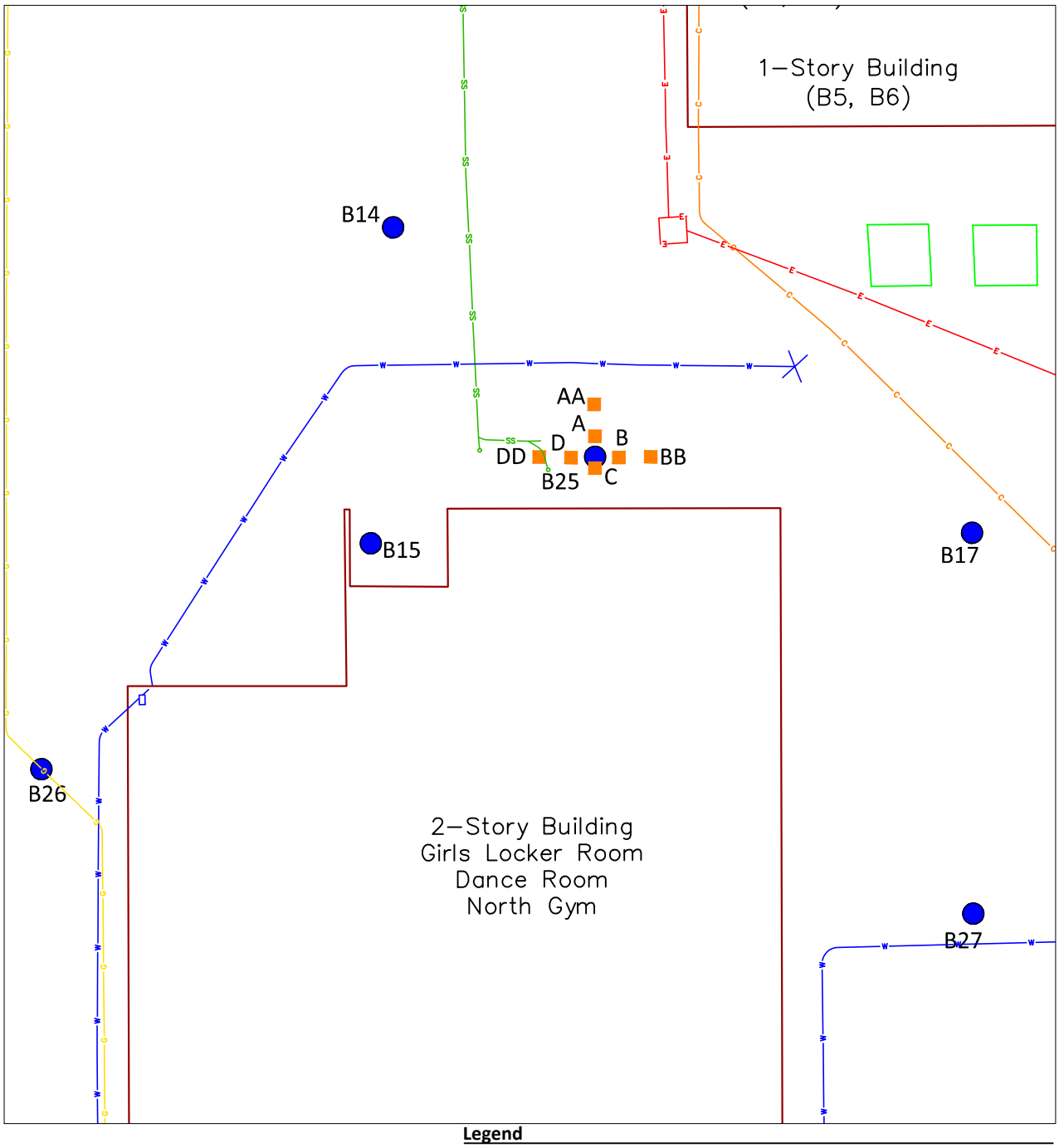
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Borings B03 and B12 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3C

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Building Footprint
- Planting Area or Grass
- Electric
- Water
- Communication
- Gas
- Sanitary Sewer

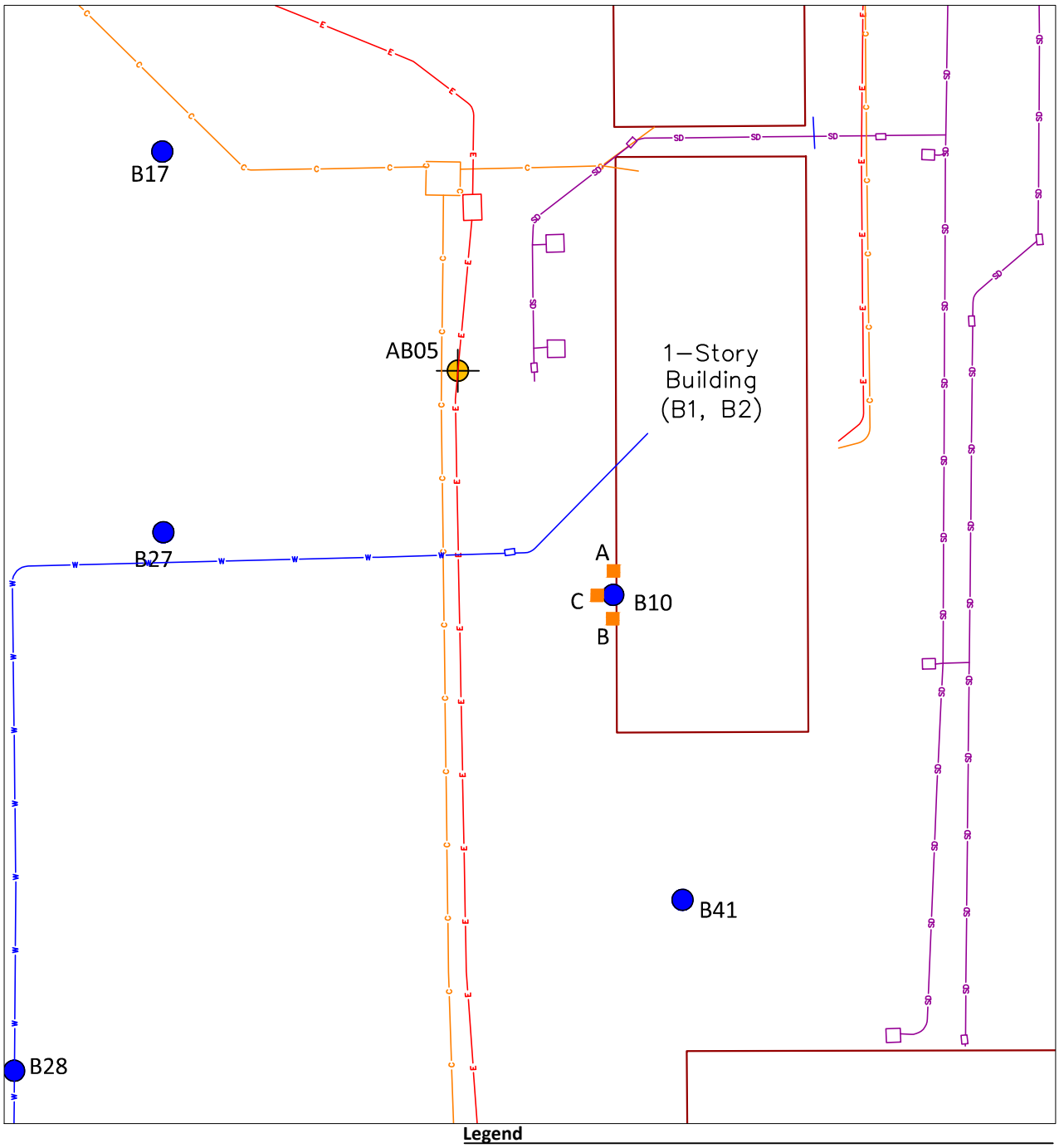
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Boring B25 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3D

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Building Footprint
- Electric
- Water
- Communication
- Storm Drain

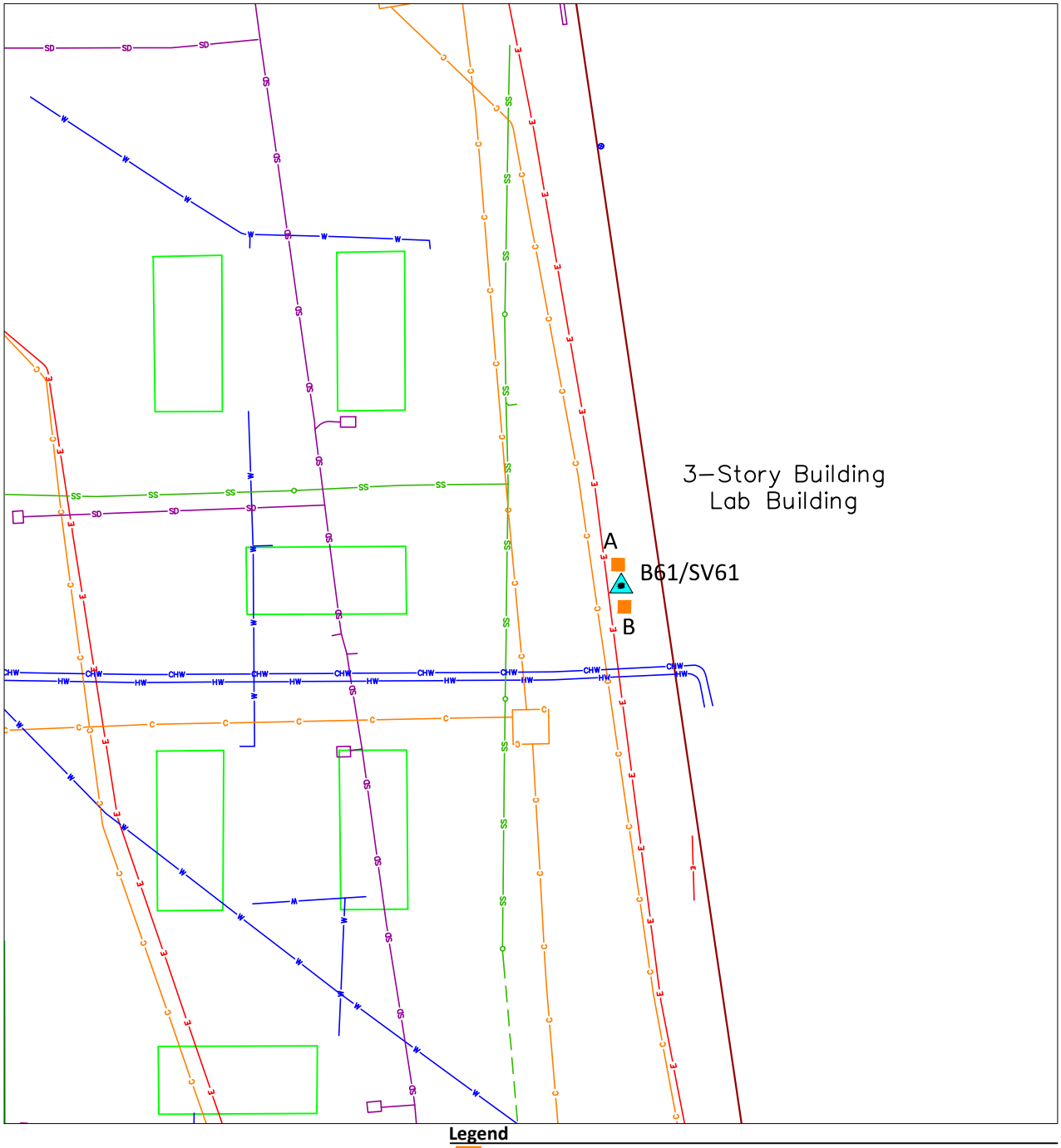
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Boring B10 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3E

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Soil Vapor Only Boring
- Building Footprint
- Planting Area or Grass
- Electric
- Chill Water
- Hot Water
- Water
- Communication
- Sanitary Sewer
- Storm Drain

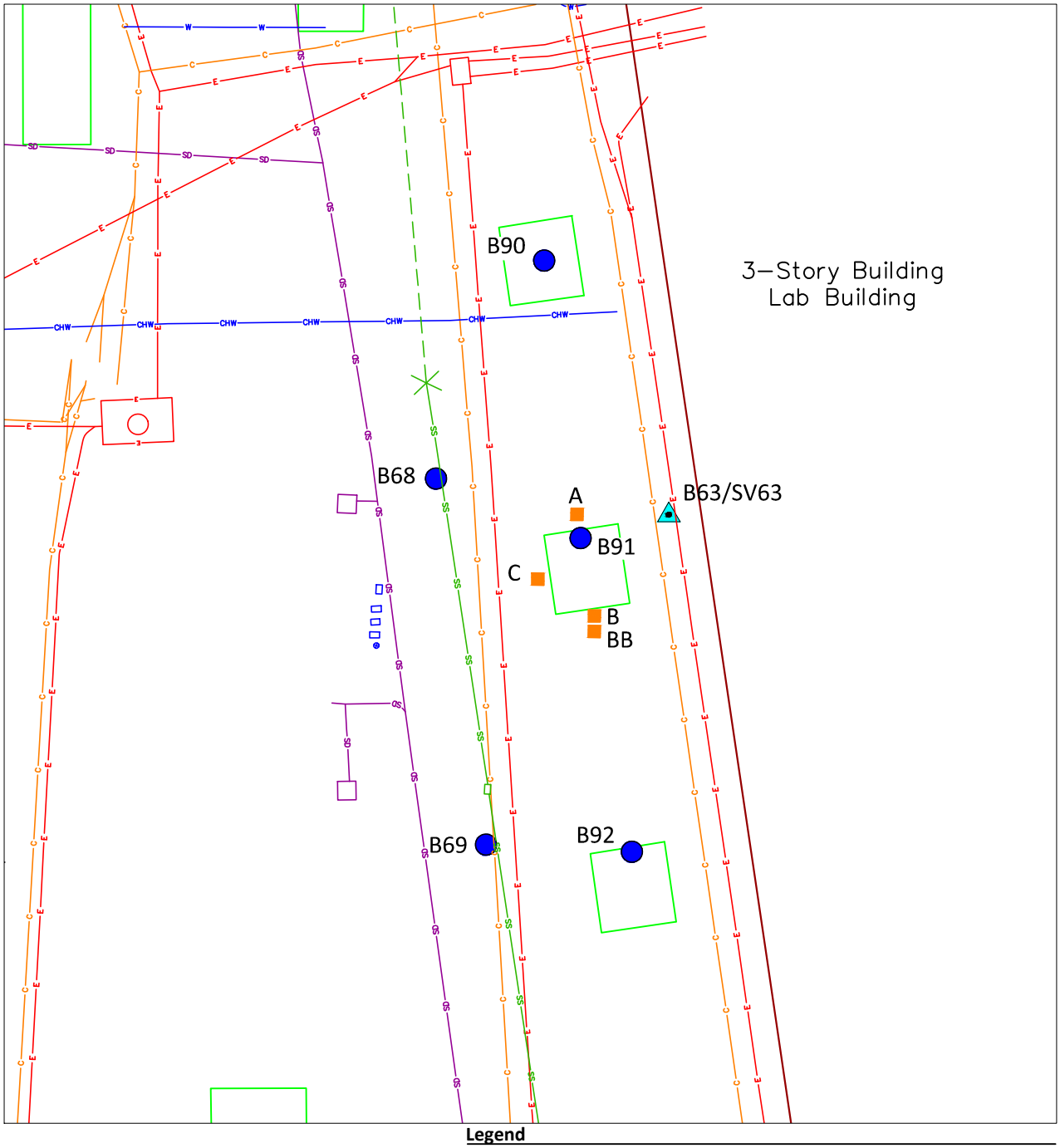
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Boring B61 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3F

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Building Footprint
- Planting Area or Grass
- Electric
- Chill Water
- Water
- Communication
- Sanitary Sewer
- Storm Drain

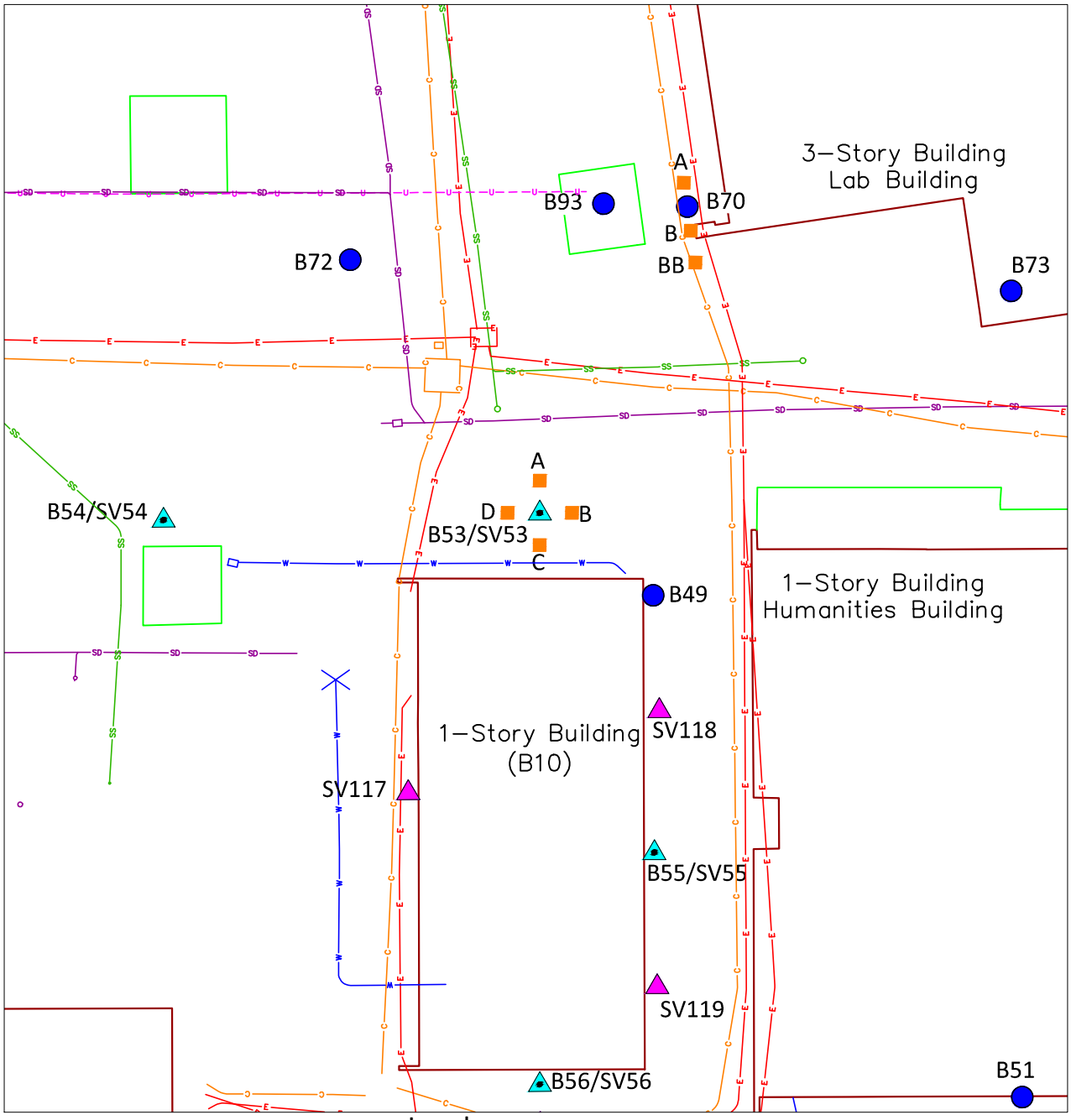
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Boring B91 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3G

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Soil/Soil Vapor Boring
- Building Footprint
- Planting Area or Grass
- Electric
- Water
- Communication
- Unknown
- Sanitary Sewer
- Storm Drain

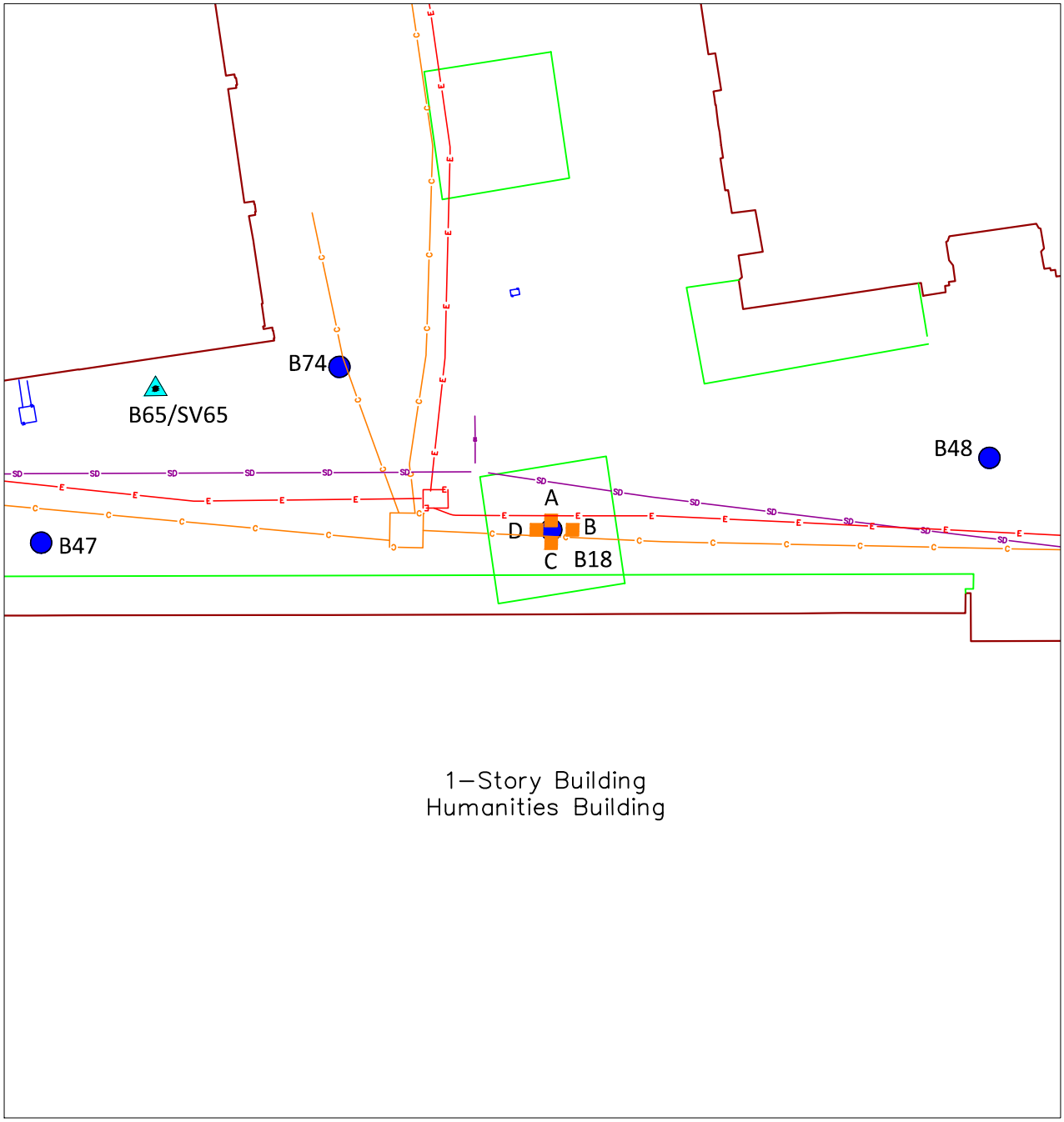
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Borings B53 and B70 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3H

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Building Footprint
- Planting Area or Grass
- Electric
- Water
- Communication
- Storm Drain

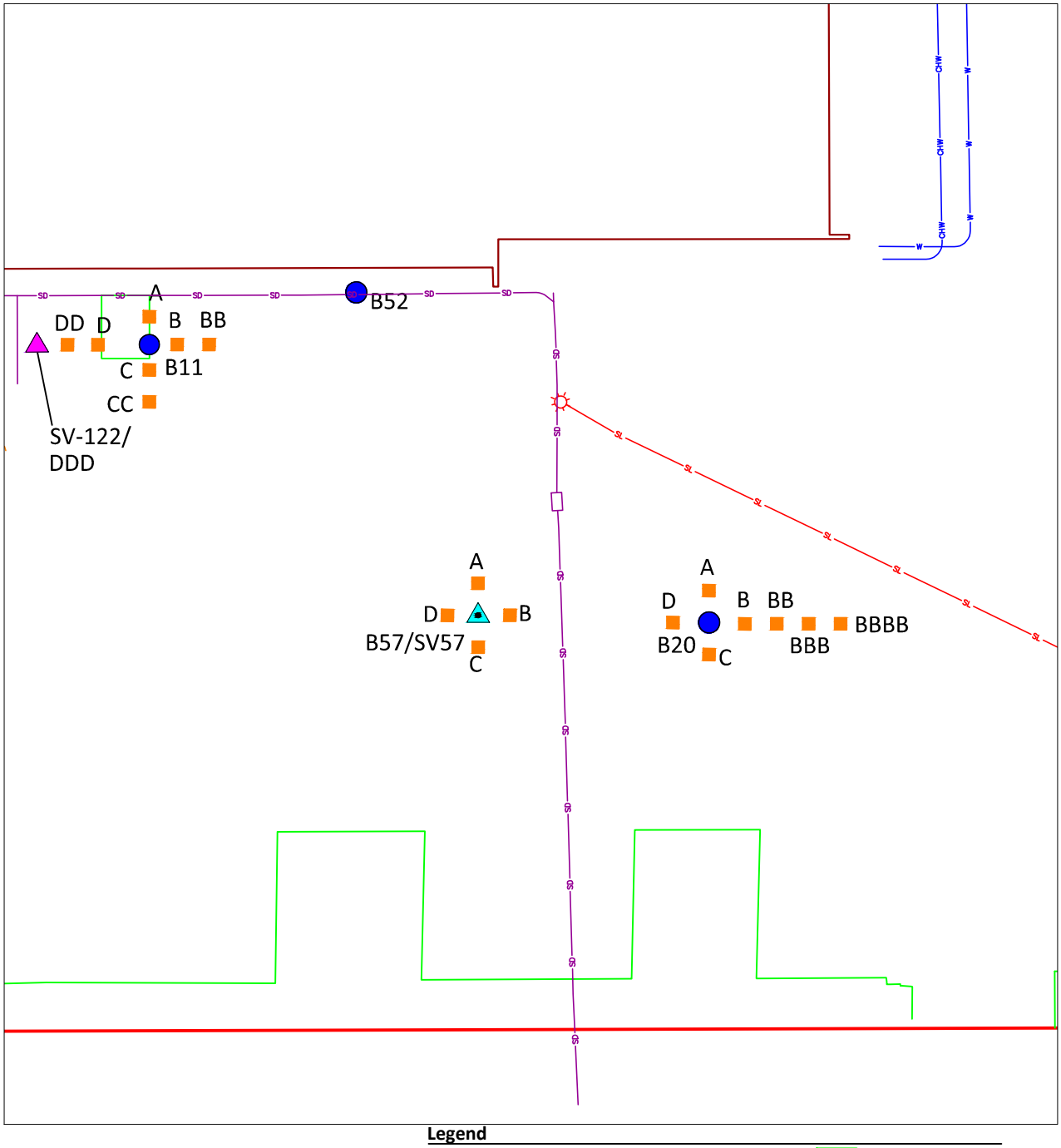
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Boring B18 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3I

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Soil/Soil Vapor Boring
- Site Boundary
- Building Footprint
- Planting Area or Grass
- Chill Water
- Street Light
- Storm Drain
- Water

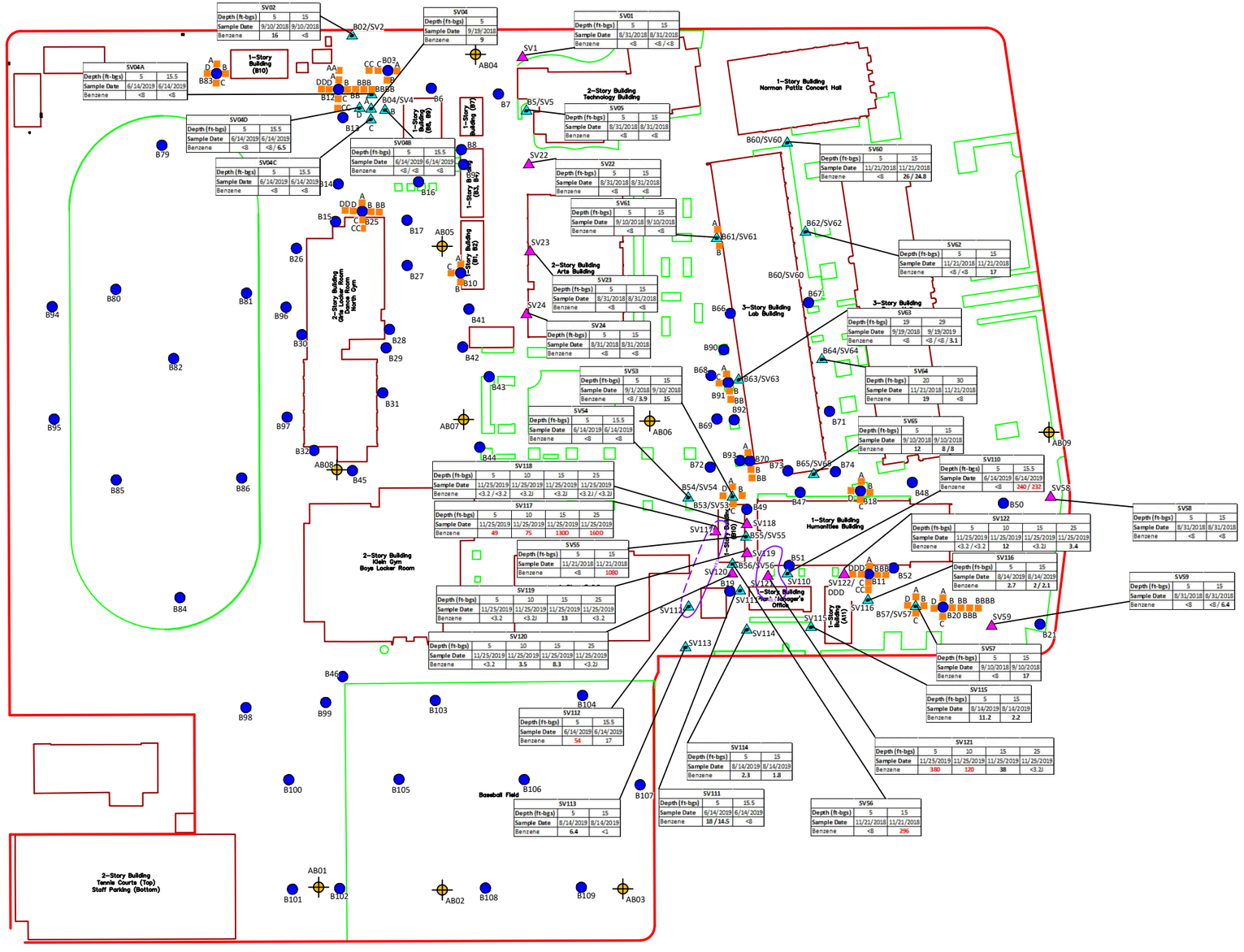
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Borings B11, B20, and B57 Step-Out Locations
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 3J

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_no excavations.dwg Drawn by: DB ; Checked by: XXX



SV02		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Benzene	16	<8

SV04	
Depth (ft-bgs)	5
Sample Date	9/19/2018
Benzene	9

SV01		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8 / <8

SV04A		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	<8	<8

SV05		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8

SV04D		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	<8	<8 / 6.5

SV04B		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	<8 / <8	<8

SV04C		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	<8	<8

SV22		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8

SV60		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Benzene	<8	26 / 24.8

SV61		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Benzene	<8	<8

SV62		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Benzene	<8 / <8	17

SV23		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8

SV63		
Depth (ft-bgs)	19	29
Sample Date	9/19/2018	9/19/2019
Benzene	<8	<8 / <8 / 3.1

SV24		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8

SV53		
Depth (ft-bgs)	5	15
Sample Date	9/1/2018	9/10/2018
Benzene	<8 / 3.9	15

SV64		
Depth (ft-bgs)	20	30
Sample Date	11/21/2018	11/21/2018
Benzene	19	<8

SV54		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	<8	<8

SV65		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Benzene	12	8 / 8

SV110		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	<8	240 / 232

SV118				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Benzene	<3.2 / <3.2	<3.2J	<3.2J	<3.2J / <3.2J

SV117				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Benzene	49	75	130D	160D

SV58		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8

SV122				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Benzene	<3.2 / <3.2	12	<3.2J	3.4

SV55		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Benzene	<8	1080

SV116		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Benzene	2.7	2 / 2.1

SV119				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Benzene	<3.2	<3.2J	13	<3.2

SV59		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Benzene	<8	<8 / 6.4

SV120				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Benzene	<3.2	3.5	8.3	<3.2J

SV57		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Benzene	<8	17

SV115		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Benzene	11.2	2.2

SV112		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	54	17

SV114		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Benzene	2.3	1.8

SV121				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Benzene	380	120	38	<3.2J

SV113		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Benzene	6.4	<1

SV111		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Benzene	18 / 14.5	<8

SV56		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Benzene	<8	296

Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area
- Isoconcentration Contour (Dashed Where Inferred)

Notes:
-All results presented in micrograms per cubic meter (µg/m³)
-ft-bgs = feet below ground surface
- < = Result is less than laboratory reporting limit, J = Estimated Value, D = RPD was not within control limits.
-Detected concentrations of benzene are shown in **BOLD**
-Benzene concentrations exceeding the soil vapor screening level of 48.5 µg/m³ calculated from the DTSC HERO Note 3 Residential Air DTSC Screening Level (June 2020) are shown in RED
-Benzene analysis was accomplished at a mobile laboratory and at a stationary laboratory via methods 8260B and TO-15, respectively, for samples SV01 (15 ft-bgs), SV04B (5 ft-bgs), SV62 (5 ft-bgs), SV63 (29 ft-bgs), SV65 (15 ft-bgs), SV110 (15.5 ft-bgs), SV116 (15 ft-bgs), SV118 (5 ft-bgs, 25 ft-bgs), and SV122 (5 ft-bgs). Results are displayed as 8260B / TO-15.
-Duplicate analysis was performed at the mobile laboratory for sample SV-59 (15 ft-bgs).
-Field duplicates were collected at SV04D (15 ft-bgs), SV53 (5 ft-bgs), SV60 (15 ft-bgs), SV63 (29 ft-bgs), and SV111 (5 ft-bgs).
-Results for SV63 (29 ft-bgs) are displayed as 8260B / TO-15 / Duplicate Result.
-HERO = Human and Ecological Risk Office
-DTSC = California Department of Toxic Substances Control; SL = Screening Level

N

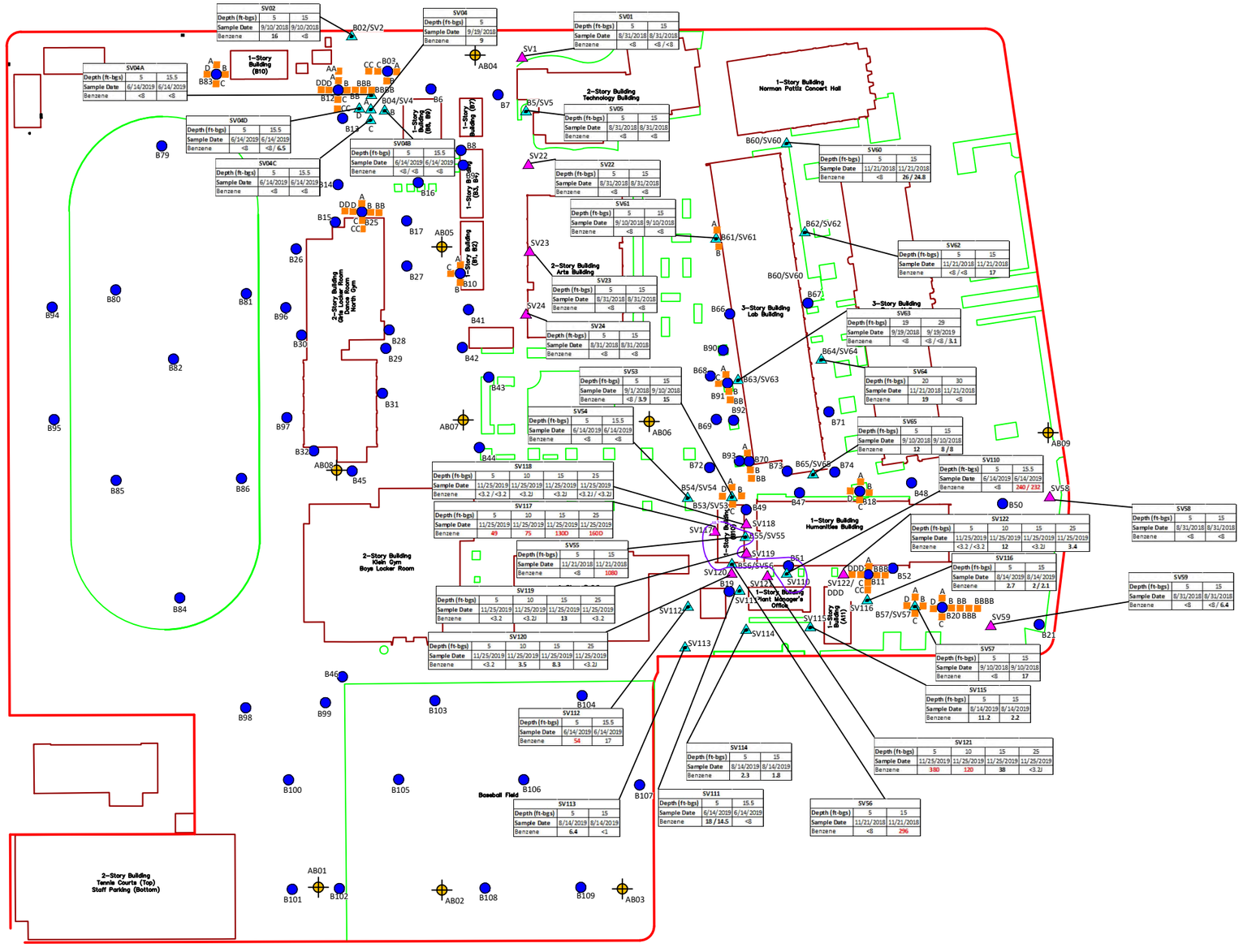
0' 65' 130' 260'
Approximate Scale in Feet

SAFETY FIRST

terraphase engineering

CLIENT: LAUSD	Benzene Isoconcentration Contour Diagram 5 Feet Below Ground Surface
PROJECT: Alexander Hamilton Senior HS	
PROJECT NUMBER: S030.008.004	Figure 4A

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20200817) Soil Gas Results.dwg Drawn By: DB



Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area
- Isoconcentration Contour (Dashed Where Inferred)

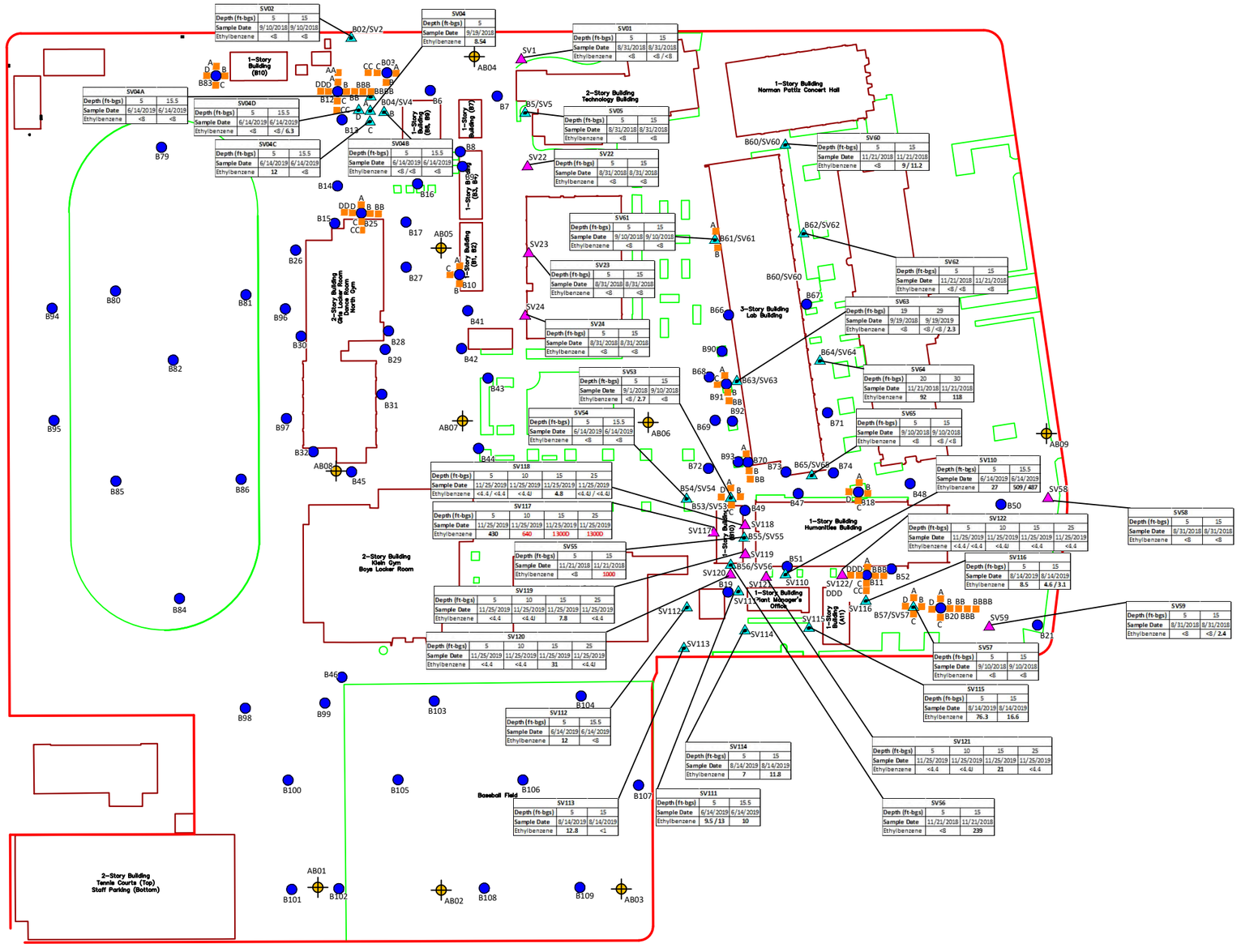
Notes:
-All results presented in micrograms per cubic meter (µg/m³)
-ft-bgs = feet below ground surface
- < = Result is less than laboratory reporting limit, J = Estimated Value, D = RPD was not within control limits.
-Detected concentrations of benzene are shown in **BOLD**
-Benzene concentrations exceeding the soil vapor screening level of 48.5 µg/m³ calculated from the DTSC HERO Note 3 Residential Air DTSC Screening Level (June 2020) are shown in RED
-Benzene analysis was accomplished at a mobile laboratory and at a stationary laboratory via methods 8260B and TO-15, respectively, for samples SV01 (15 ft-bgs), SV04B (5 ft-bgs), SV62 (5 ft-bgs), SV63 (29 ft-bgs), SV65 (15 ft-bgs), SV110 (15.5 ft-bgs), SV116 (15 ft-bgs), SV118 (5 ft-bgs, 25 ft-bgs), and SV122 (5 ft-bgs). Results are displayed as 8260B / TO-15.
-Duplicate analysis was performed at the mobile laboratory for sample SV-59 (15 ft-bgs).
-Field duplicates were collected at SV04D (15 ft-bgs), SV53 (5 ft-bgs), SV60 (15 ft-bgs), SV63 (29 ft-bgs), and SV111 (5 ft-bgs).
-Results for SV63 (29 ft-bgs) are displayed as 8260B / TO-15 / Duplicate Result.
-HERO = Human and Ecological Risk Office
-DTSC = California Department of Toxic Substances Control; SL = Screening Level

N

0' 65' 130' 260'
Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Benzene Isoconcentration Contour Diagram 15 Feet Below Ground Surface
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 4B

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20200817) Soil Gas Results.dwg Drawn By: DB



Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area
- Isoconcentration Contour (Dashed Where Inferred)

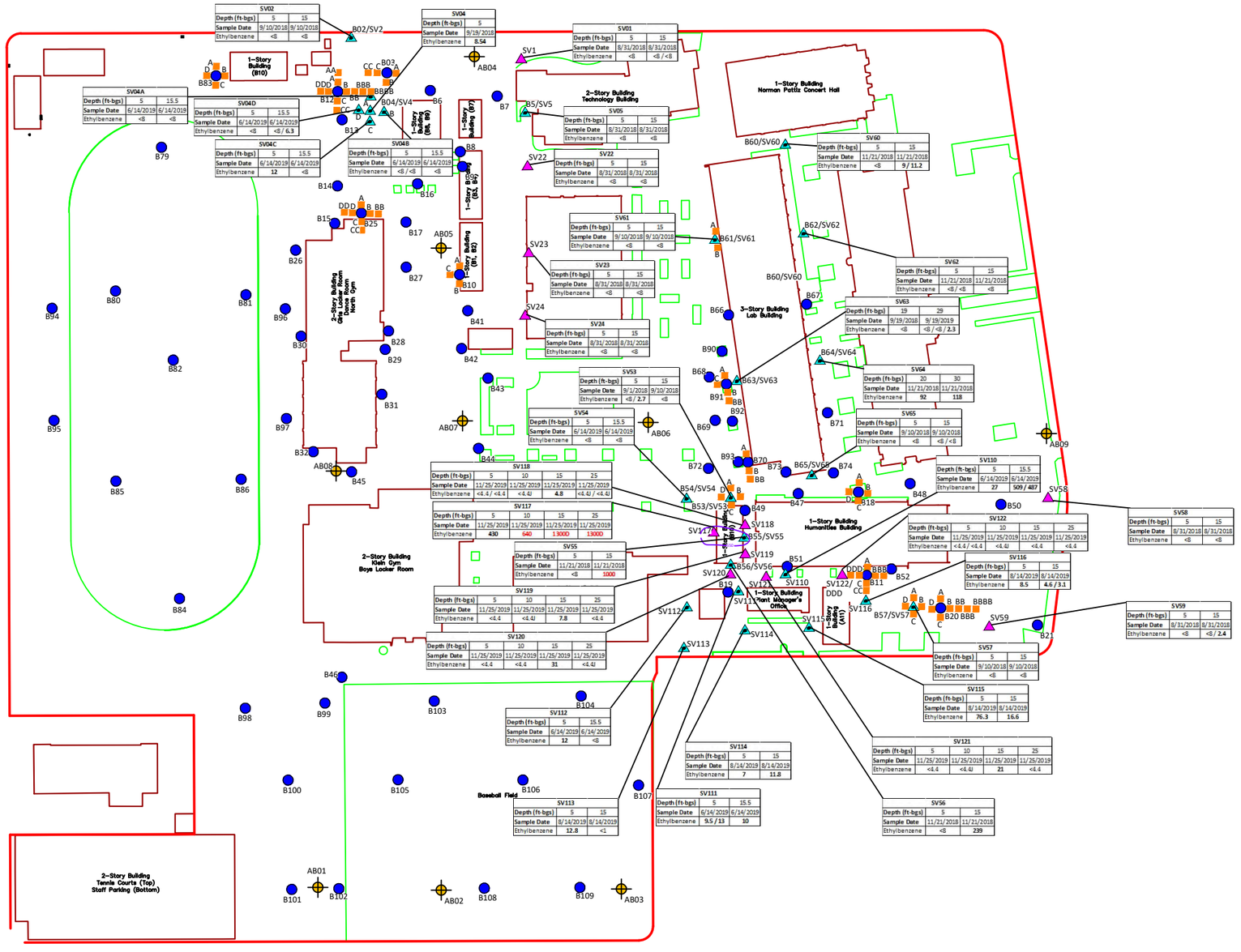
Notes:
-All results presented in micrograms per cubic meter (µg/m³)
-ft-bgs = feet below ground surface
- < = Result is less than laboratory reporting limit, J = Estimated Value, D = RPD was not within control limits.
-Detected concentrations of benzene are shown in **BOLD**
-Ethylbenzene concentrations exceeding the soil vapor screening level of 550 µg/m³ calculated from the USEPA Residential RSL (May 2020) are shown in RED
-Ethylbenzene analysis was accomplished at a mobile laboratory and at a stationary laboratory via methods 8260B and TO-15, respectively, for samples SV01 (15 ft-bgs), SV04B (5 ft-bgs), SV62 (5 ft-bgs), SV63 (29 ft-bgs), SV65 (15 ft-bgs), SV110 (15.5 ft-bgs), SV116 (15 ft-bgs), SV118 (5 ft-bgs, 25 ft-bgs), and SV122 (5 ft-bgs). Results are displayed as 8260B / TO-15.
-Duplicate analysis was performed at the mobile laboratory for sample SV-59 (15 ft-bgs).
-Field duplicates were collected at SV04D (15 ft-bgs), SV53 (5 ft-bgs), SV60 (15 ft-bgs), SV63 (29 ft-bgs), and SV111 (5 ft-bgs).
-Results for SV63 (29 ft-bgs) are displayed as 8260B / TO-15 / Duplicate Result.
-RSL = Regional Screening Level

N

0' 65' 130' 260'
Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Ethylbenzene Isoconcentration Contour Diagram 5 Feet Below Ground Surface
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 5A

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20200817) Soil Gas Results.dwg Drawn By: DB



SV02		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Ethylbenzene	<8	<8

SV04	
Depth (ft-bgs)	5
Sample Date	9/19/2018
Ethylbenzene	**8.54**

SV01		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8 / <8

SV04A		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	<8	<8

SV04D		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	<8	<8 / **6.3**

SV04C		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	**12**	<8

SV04B		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	<8 / <8	<8

SV05		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8

SV22		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8

SV60		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Ethylbenzene	<8	**9 / 11.2**

SV61		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Ethylbenzene	<8	<8

SV23		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8

SV62		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Ethylbenzene	<8 / <8	<8

SV63		
Depth (ft-bgs)	19	29
Sample Date	9/19/2018	9/19/2019
Ethylbenzene	<8	<8 / <8 / **2.3**

SV24		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8

SV64		
Depth (ft-bgs)	20	30
Sample Date	11/21/2018	11/21/2018
Ethylbenzene	**92**	**118**

SV53		
Depth (ft-bgs)	5	15
Sample Date	9/1/2018	9/10/2018
Ethylbenzene	<8 / **2.7**	<8

SV54		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	<8	<8

SV65		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Ethylbenzene	<8	<8 / <8

SV110		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	**27**	**509 / 487**

SV118				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Ethylbenzene	<4.4 / <4.4	<4.4J	**4.8**	<4.4J / <4.4J

SV117				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Ethylbenzene	**430**	**640**	**1300D**	**1300D**

SV55		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Ethylbenzene	<8	**1000**

SV119				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Ethylbenzene	<4.4	<4.4J	**7.8**	<4.4

SV120				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Ethylbenzene	<4.4	<4.4	**31**	<4.4J

SV122				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Ethylbenzene	<4.4 / <4.4	<4.4J	<4.4	<4.4

SV58		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8

SV116		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Ethylbenzene	**8.5**	**4.6 / 3.1**

SV59		
Depth (ft-bgs)	5	15
Sample Date	8/31/2018	8/31/2018
Ethylbenzene	<8	<8 / **2.4**

SV57		
Depth (ft-bgs)	5	15
Sample Date	9/10/2018	9/10/2018
Ethylbenzene	<8	<8

SV115		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Ethylbenzene	**76.3**	**16.6**

SV112		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	**12**	<8

SV114		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Ethylbenzene	**7**	**11.8**

SV121				
Depth (ft-bgs)	5	10	15	25
Sample Date	11/25/2019	11/25/2019	11/25/2019	11/25/2019
Ethylbenzene	<4.4	<4.4J	**21**	<4.4

SV111		
Depth (ft-bgs)	5	15.5
Sample Date	6/14/2019	6/14/2019
Ethylbenzene	**9.5 / 13**	**10**

SV113		
Depth (ft-bgs)	5	15
Sample Date	8/14/2019	8/14/2019
Ethylbenzene	**12.8**	<1

SV56		
Depth (ft-bgs)	5	15
Sample Date	11/21/2018	11/21/2018
Ethylbenzene	<8	**239**

Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area
- Isoconcentration Contour (Dashed Where Inferred)

Notes:
-All results presented in micrograms per cubic meter (µg/m³)
-ft-bgs = feet below ground surface
- < = Result is less than laboratory reporting limit, J = Estimated Value, D = RPD was not within control limits.
-Detected concentrations of benzene are shown in **BOLD**
-Ethylbenzene concentrations exceeding the soil vapor screening level of 550 µg/m³ calculated from the USEPA Residential RSL (May 2020) are shown in RED
-Ethylbenzene analysis was accomplished at a mobile laboratory and at a stationary laboratory via methods 8260B and TO-15, respectively, for samples SV01 (15 ft-bgs), SV04B (5 ft-bgs), SV62 (5 ft-bgs), SV63 (29 ft-bgs), SV65 (15 ft-bgs), SV110 (15.5 ft-bgs), SV116 (15 ft-bgs), SV118 (5 ft-bgs, 25 ft-bgs), and SV122 (5 ft-bgs). Results are displayed as 8260B / TO-15.
-Duplicate analysis was performed at the mobile laboratory for sample SV-59 (15 ft-bgs).
-Field duplicates were collected at SV04D (15 ft-bgs), SV53 (5 ft-bgs), SV60 (15 ft-bgs), SV63 (29 ft-bgs), and SV111 (5 ft-bgs).
-Results for SV63 (29 ft-bgs) are displayed as 8260B / TO-15 / Duplicate Result.
-RSL = Regional Screening Level

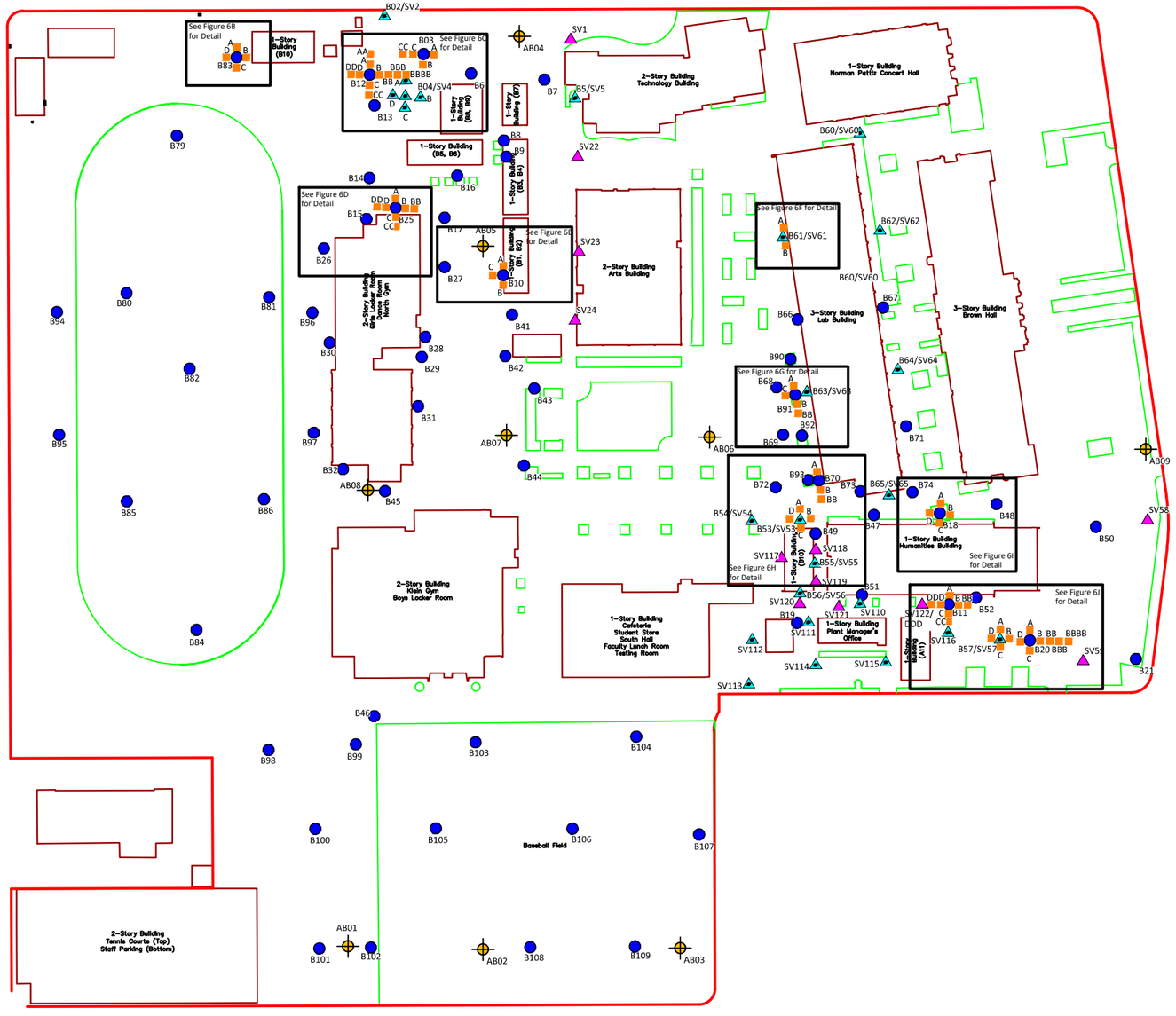
N

0' 65' 130' 260'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Ethylbenzene Isoconcentration Contour Diagram 15 Feet Below Ground Surface
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 5B

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20200817) Soil Gas Results.dwg Drawn By: DB



Legend

- Step-Out Shallow Soil Boring
- Background Arsenic Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil/Soil Vapor Boring
- Soil Vapor Only Boring
- Site Boundary
- Building Footprint
- Planting Area or Grass

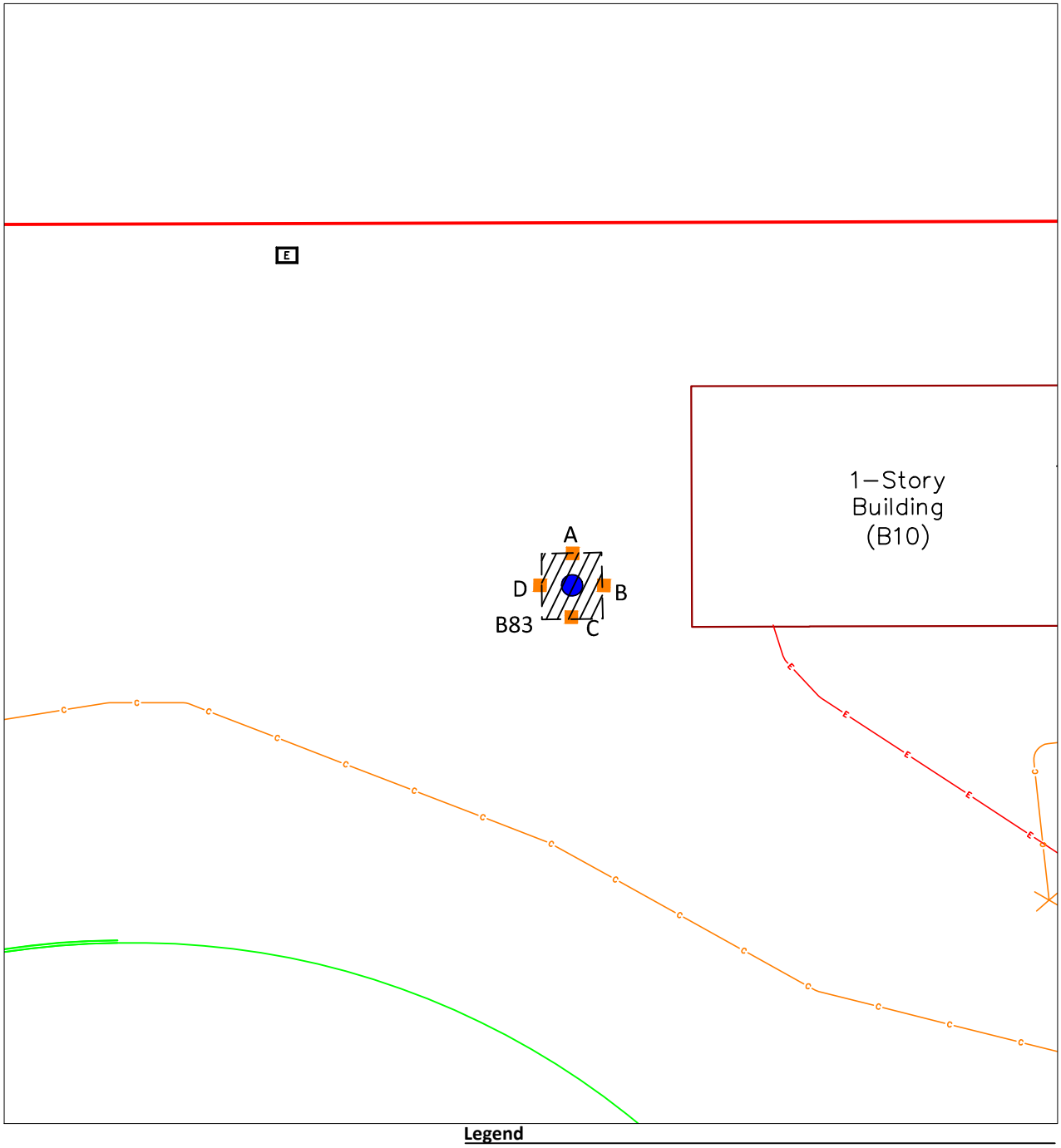
N

0' 65' 130' 260'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Site Index
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6A

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20200309) Index Figure.dwg Drawn By: DB



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Site Boundary
- Building Footprint
- Grass Area
- Excavation Boundary
- Electric
- Communication

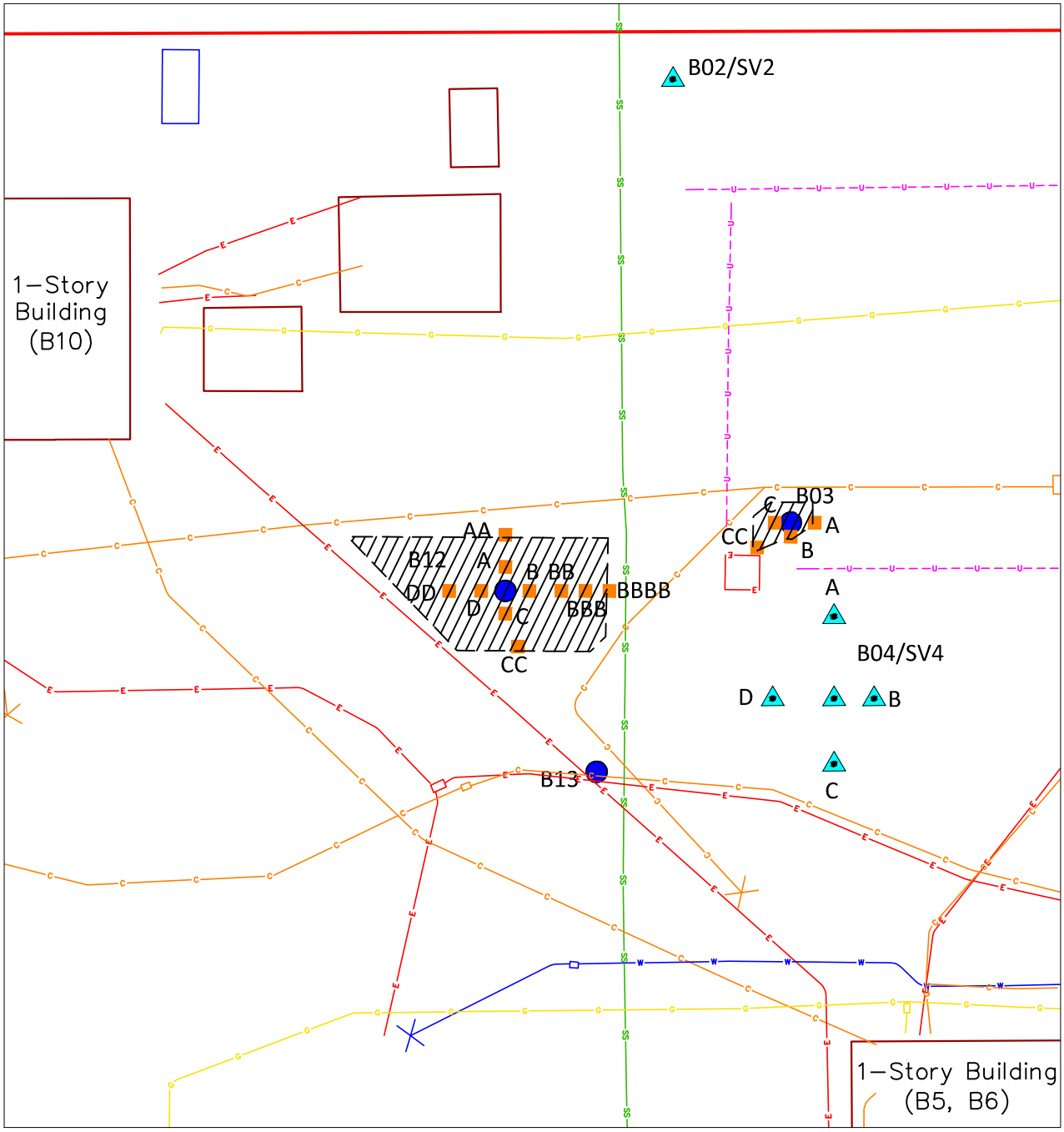
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B83
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6B

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

Step-Out Soil Boring	Electric
Shallow Boring (<2.5 Feet)	Water
Soil Vapor Only Boring	Communication
Site Boundary	Gas
Building Footprint	Sanitary Sewer
Excavation Boundary	Unknown

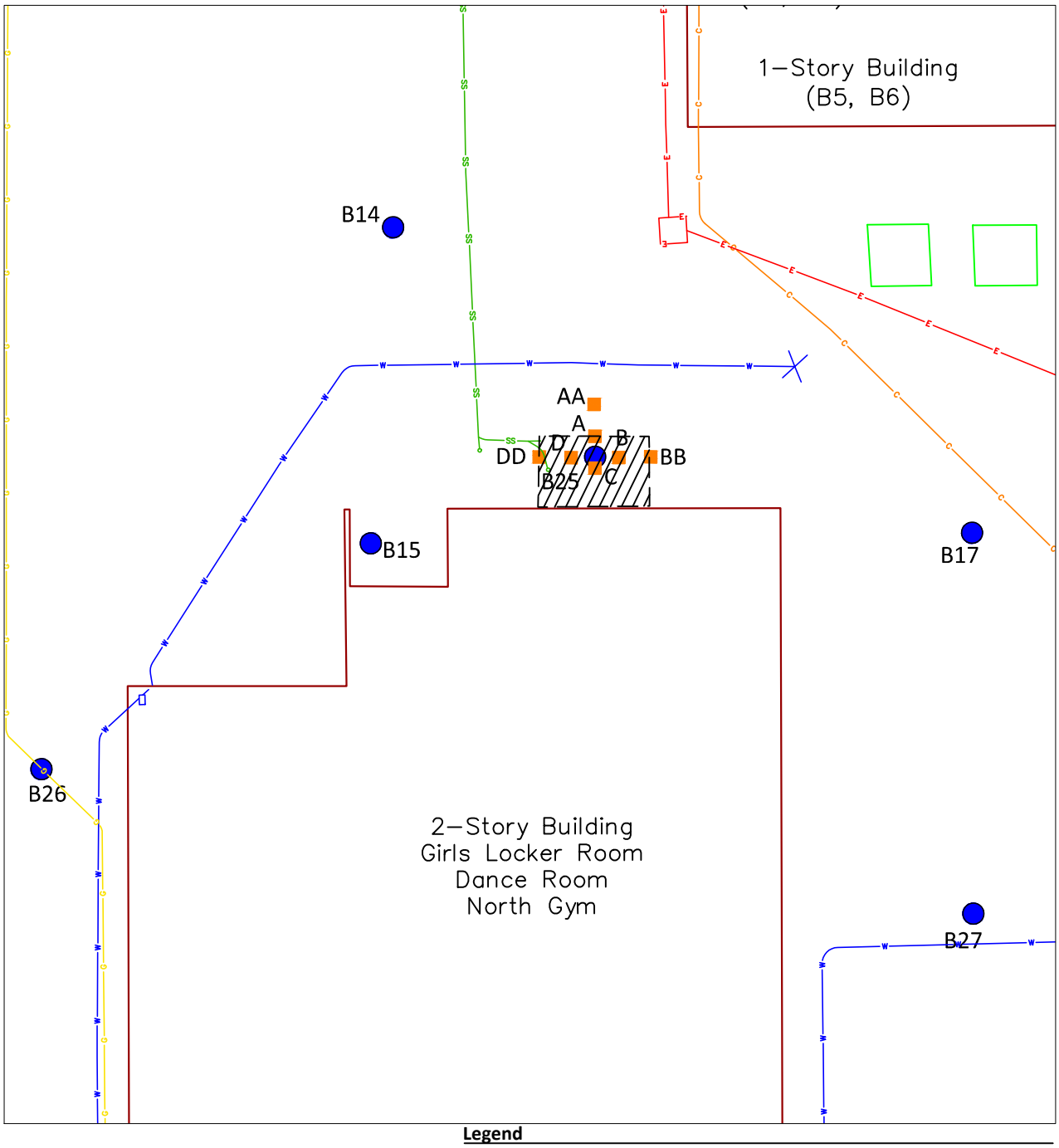
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B03 and B12
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6C

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Building Footprint
- Planting Area or Grass
- Proposed Excavation Boundary
- Electric
- Water
- Communication
- Gas
- Sanitary Sewer

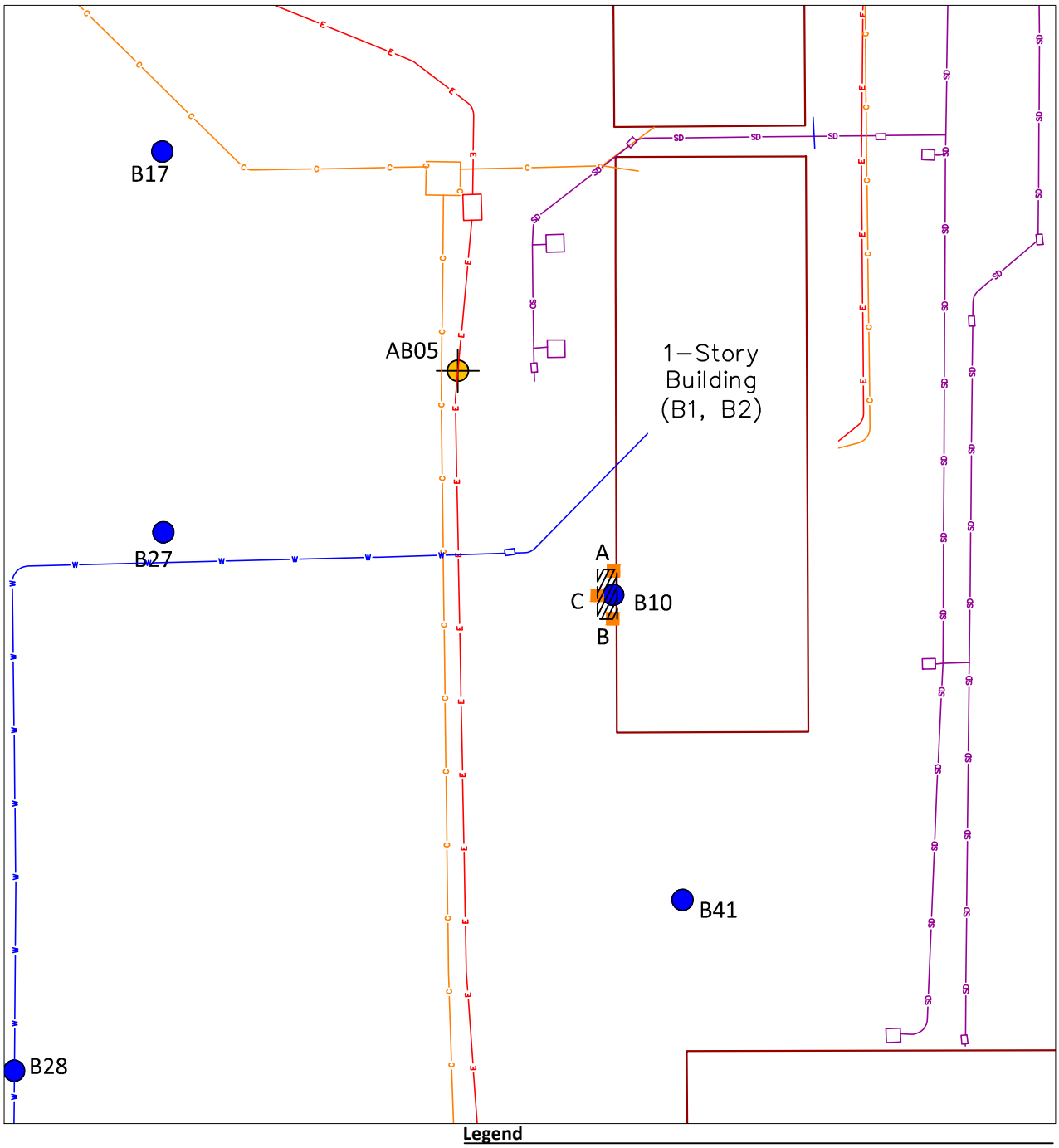
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B25
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6D

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Background Arsenic Soil Sample
- Shallow Boring (<2.5 Feet)
- Building Footprint
- Proposed Excavation Boundary
- Electric
- Water
- Communication
- Storm Drain

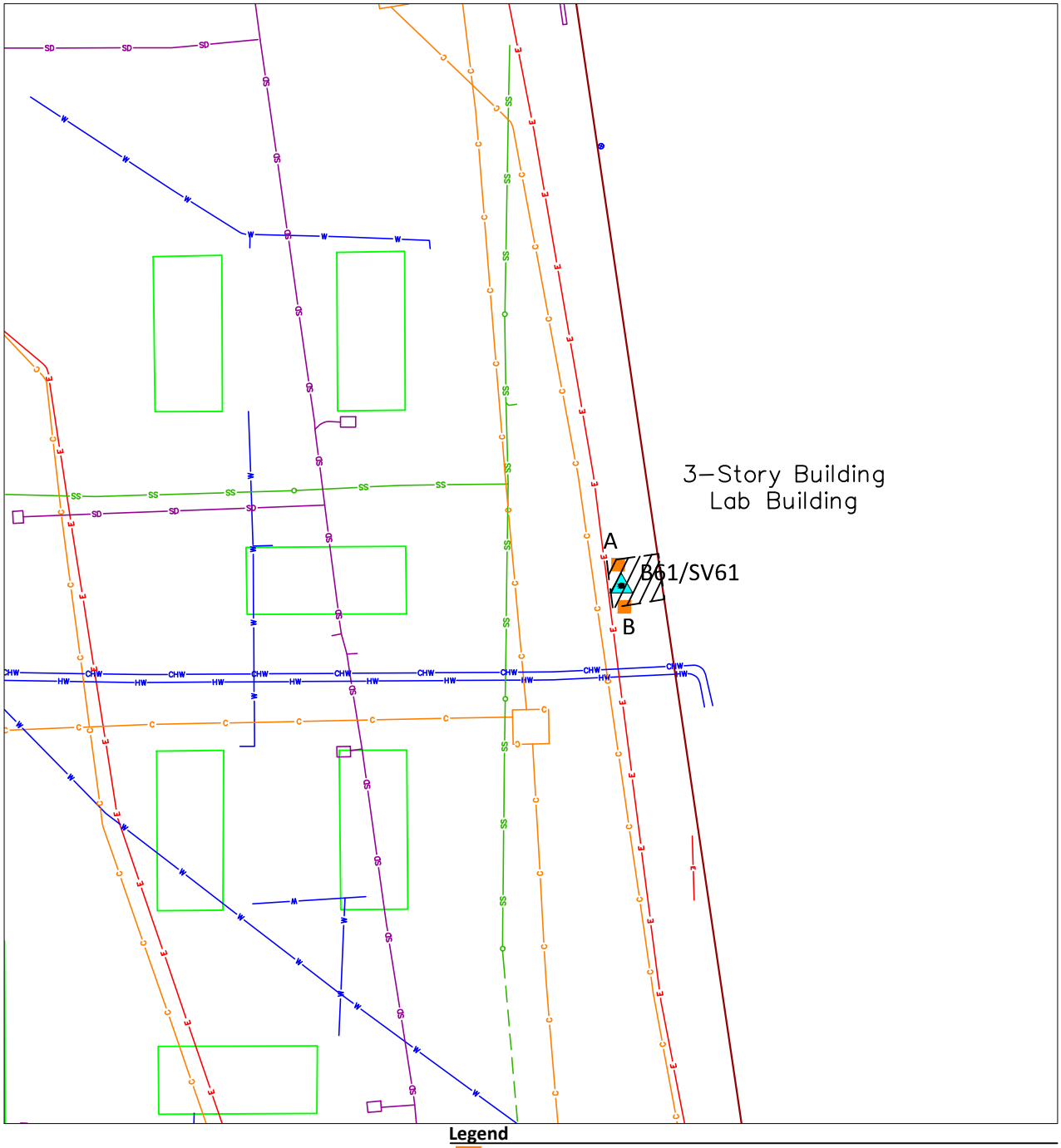
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B10
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6E

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

Step-Out Soil Boring	Chill Water
Soil Vapor Only Boring	Hot Water
Building Footprint	Water
Planting Area or Grass	Communication
Proposed Excavation Boundary	Sanitary Sewer
Electric	Storm Drain

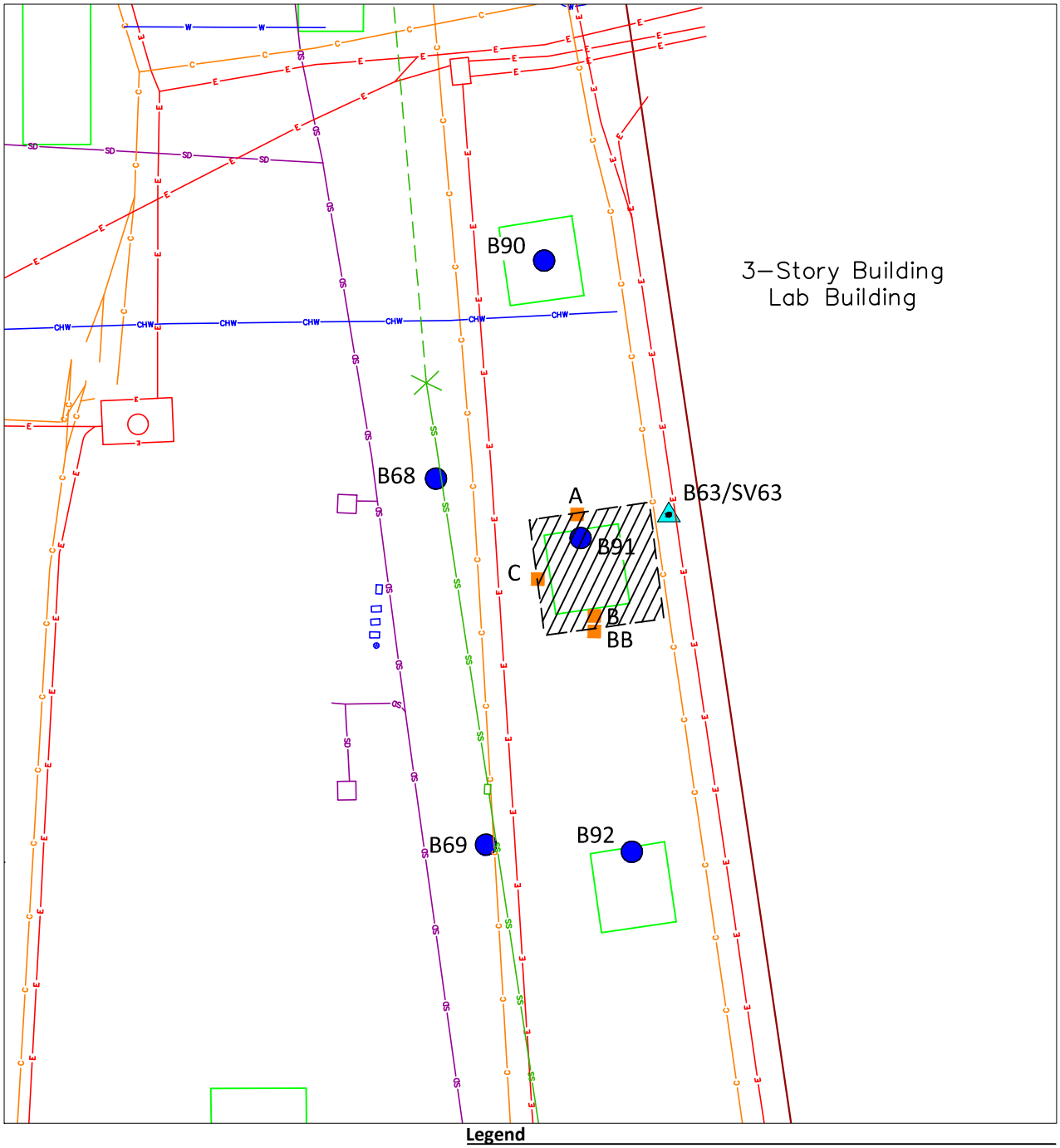
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B61
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6F

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Building Footprint
- Planting Area
- Excavation Boundary
- Electric
- Chill Water
- Water
- Communication
- Sanitary Sewer
- Storm Drain

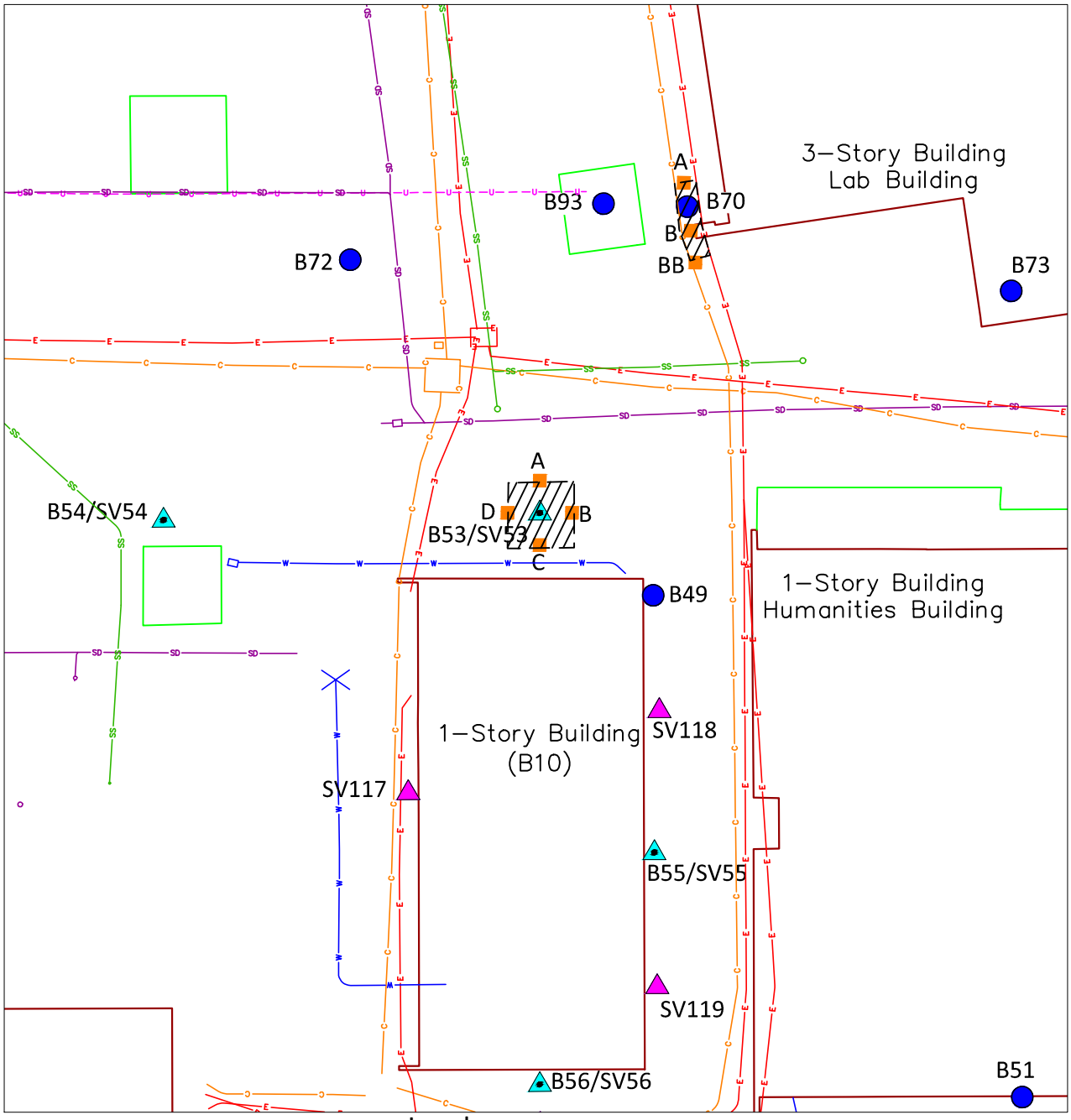
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B91
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6G

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Soil/Soil Vapor Boring
- Building Footprint
- Planting Area or Grass
- Proposed Excavation Boundary
- Electric
- Water
- Communication
- Unknown
- Sanitary Sewer
- Storm Drain

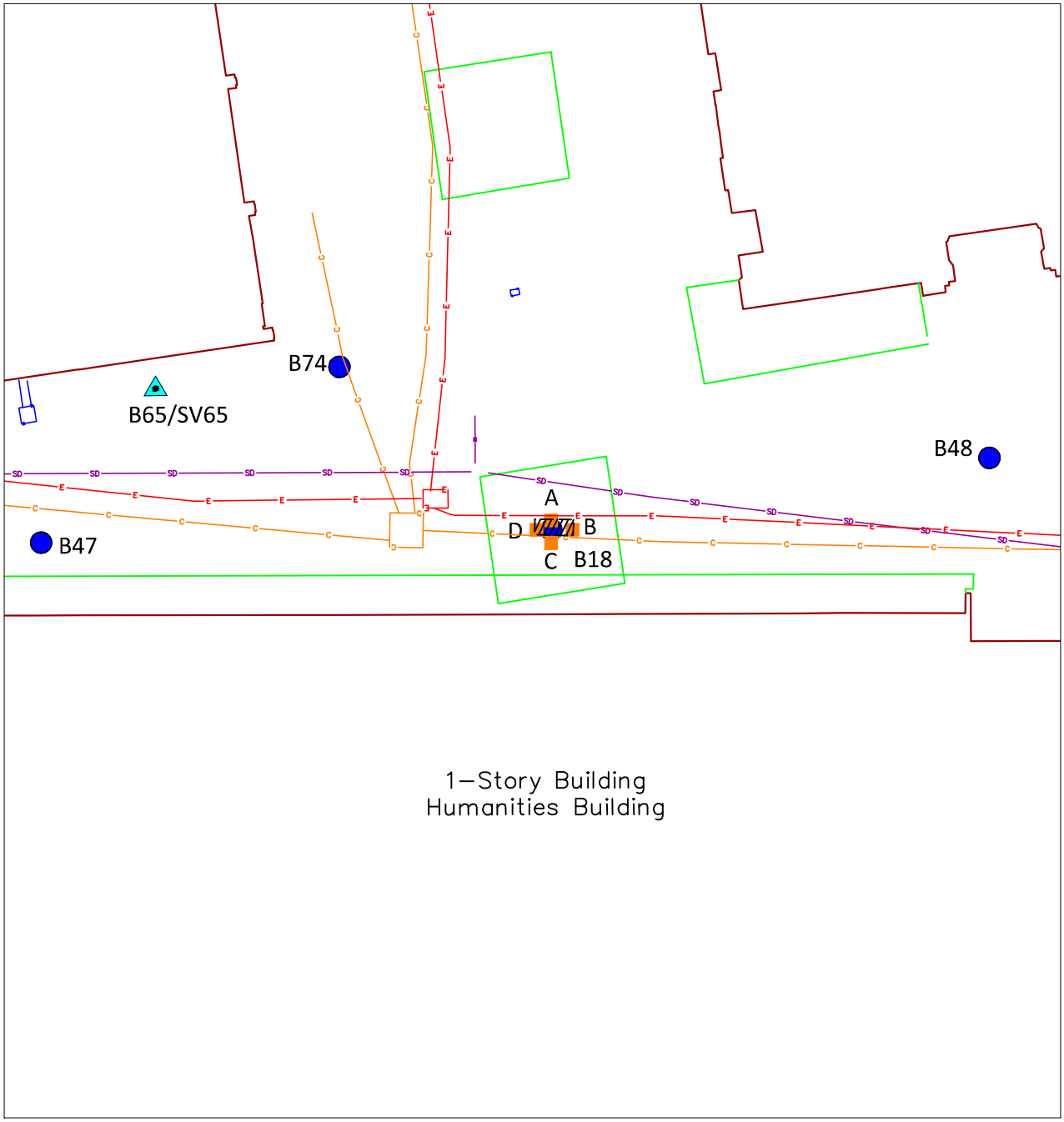
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B53 and B70
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6H

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Building Footprint
- Planting Area or Grass
- Proposed Excavation Boundary
- Electric
- Water
- Communication
- Storm Drain

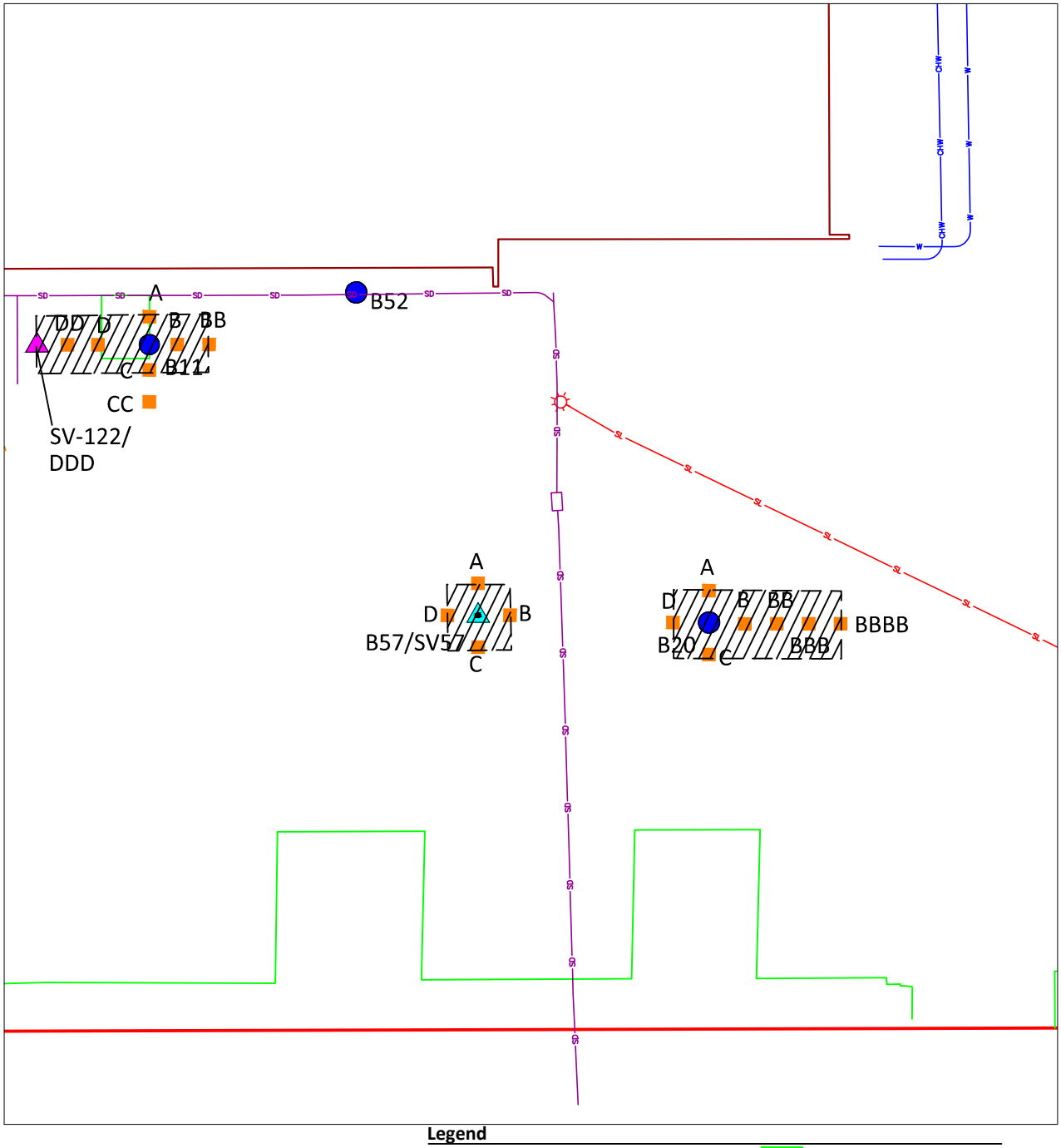
N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B18
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6I

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX



Legend

- Step-Out Soil Boring
- Shallow Boring (<2.5 Feet)
- Soil Vapor Only Boring
- Soil/Soil Vapor Boring
- Site Boundary
- Building Footprint
- Planting Area or Grass
- Proposed Exc. Boundary
- Chill Water
- Street Light
- Storm Drain
- Water

N

0' 10' 20' 40'

Approximate Scale in Feet

SAFETY FIRST	CLIENT: LAUSD	Proposed Excavation Around B11, B20, and B57
terraphase engineering	PROJECT: Alexander Hamilton Senior HS	
	PROJECT NUMBER: S030.008.004	Figure 6J

J:\CADD FILES\S030 Los Angeles Unified\008 - Hamilton\Stepout Borings\(20190821) Step-out Locations_excavations.dwg Drawn by: DB ; Checked by: XXX

TABLES

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
SV01	SV01-5.0'	F-0170	8/31/2018 10:30	5	Soil Gas	Primary											X			
	SV01-15.0'	F-0170	8/31/2018 10:45	15	Soil Gas	Primary											X			
	SV01-15.0' REP	F-0170	8/31/2018 10:59	15	Soil Gas	Duplicate											X			
B02/SV02	B02-5.0	T182803	9/10/2018 12:10	5	Soil	Primary	X						X	X	X					
	B02-10.0	T182803	9/10/2018 12:15	10	Soil	Primary	X						X	X	X					
	B02-15.0	T182803	9/10/2018 12:20	15	Soil	Primary	X						X	X	X					
	SV02-5.0'	F-0173	9/10/2018 14:38	5	Soil Gas	Primary											X			
	SV02-15.0'	F-0173	9/10/2018 14:39	15	Soil Gas	Primary											X			
B03	B03-0.5	T182803	9/10/2018 13:00	0.5	Soil	Primary		X	X											
	B03-1.5	T182803	9/10/2018 13:02	1.5	Soil	Primary		X	X											X
	B03-2.5	T182803	9/10/2018 13:05	2.5	Soil	Primary		X	X											
B03A	B03A-1.5	416293	6/13/2019 12:57	1.5	Soil	Primary		X												
B03B	B03B-1.5	416293	6/13/2019 13:00	1.5	Soil	Primary		X												
B03C	B03C-1.5	416293	6/13/2019 12:52	1.5	Soil	Primary		X												
B03CC	B03-CC-1.5	418425	8/16/2019 0:00	1.5	Soil	Primary		X												
B04/SV04	B04-2.5	T182898	9/19/2018 7:45	2.5	Soil	Primary	X				X	X	X	X	X	X				
	B04-2.5 DUP	T182898	9/19/2018 7:45	2.5	Soil	Duplicate	X				X	X	X	X	X	X				
	B04-5.0	T182898	9/19/2018 7:47	5	Soil	Primary	X				X	X	X	X	X	X				
	B4-5'	F-0180	9/19/2018 10:45	5	Soil Gas	Primary											X			
SV04A	SV04A-5.0	D-1648	6/14/2019 8:18	5	Soil Gas	Primary											X			
	SV04A-15.5	D-1648	6/14/2019 8:34	15.5	Soil Gas	Primary											X			
SV04B	SV04B-5.0	D-1648	6/14/2019 8:52	5	Soil Gas	Primary											X			
	SV04B-5.0 REP	D-1648	6/14/2019 9:00	5	Soil Gas	Duplicate											X			
	SV04B-15.5	D-1648	6/14/2019 9:25	15.5	Soil Gas	Primary											X			
SV04C	SV04C-5.0	D-1648	6/14/2019 9:43	5	Soil Gas	Primary											X			
	SV04C-15.5	D-1648	6/14/2019 9:58	15.5	Soil Gas	Primary											X			
SV04D	SV04D-5.0	D-1648	6/14/2019 10:11	5	Soil Gas	Primary											X			
	SV04D-15.5	D-1648	6/14/2019 10:23	15.5	Soil Gas	Primary											X			
	SV04D-15.5-Dup	ST-13880	6/14/2019 13:39	15.5	Soil Gas	Duplicate												X		
B05/SV05	B05-0.5	T182726	8/31/2018 11:10	0.5	Soil	Primary		X	X											
	B05-1.5	T182726	8/31/2018 11:15	1.5	Soil	Primary		X	X											
	B05-2.5	T182726	8/31/2018 11:20	2.5	Soil	Primary		X	X											
	B05-5.0	T182726	8/31/2018 10:55	5	Soil	Primary	X						X	X	X					
	B05-10.0	T182726	8/31/2018 11:00	10	Soil	Primary	X						X	X	X					
	B05-15.0	T182726	8/31/2018 11:05	15	Soil	Primary	X						X	X	X					
	SV05-5.0'	F-0170	8/31/2018 11:08	5	Soil Gas	Primary											X			
	SV05-15.0'	F-0170	8/31/2018 13:25	15	Soil Gas	Primary											X			
B06	B06-0.5	T182803	9/10/2018 12:50	0.5	Soil	Primary		X	X											
	B06-1.5	T182803	9/10/2018 12:51	1.5	Soil	Primary		X	X											
	B06-2.5	T182803	9/10/2018 12:55	2.5	Soil	Primary		X	X											

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B07	B07-0.5	T182803	9/10/2018 13:20	0.5	Soil	Primary		X	X											
	B07-1.5	T182803	9/10/2018 13:21	1.5	Soil	Primary		X	X											
	B07-2.5	T182803	9/10/2018 13:25	2.5	Soil	Primary		X	X											
B08	B08-0.5	T182803	9/10/2018 13:35	0.5	Soil	Primary		X	X											
	B08-1.5	T182803	9/10/2018 13:36	1.5	Soil	Primary		X	X											
	B08-2.5	T182803	9/10/2018 13:38	2.5	Soil	Primary		X	X											
B09	B09-0.5	T182803	9/10/2018 13:45	0.5	Soil	Primary		X	X											
	B09-1.5	T182803	9/10/2018 13:46	1.5	Soil	Primary		X	X											
	B09-2.5	T182803	9/10/2018 13:48	2.5	Soil	Primary		X	X											
B10	B10-0.5	T182803	9/10/2018 14:35	0.5	Soil	Primary		X	X											X
	B10-1.5	T182803	9/10/2018 14:37	1.5	Soil	Primary		X	X											
	B10-2.5	T182803	9/10/2018 14:40	2.5	Soil	Primary		X	X											
B10A	B10A-0.5	416293	6/13/2019 11:18	0.5	Soil	Primary		X												
	B10A-0.5-DUP	416293	6/13/2019 11:18	0.5	Soil	Duplicate		X												
B10B	B10B-0.5	416293	6/13/2019 11:20	0.5	Soil	Primary		X												
B10C	B10C-0.5	416293	6/13/2019 11:21	0.5	Soil	Primary		X												
B11	B11-0.5	T183212	10/20/2018 9:20	0.5	Soil	Primary		X	X											
	B11-1.5	T183212	10/20/2018 9:21	1.5	Soil	Primary		X	X											
	B11-2.5	T183212	10/20/2018 9:22	2.5	Soil	Primary		X	X											
B11A	B11A-1.5	416293	6/13/2019 8:34	1.5	Soil	Primary		X												
	B11A-1.5-DUP	416293	6/13/2019 8:34	1.5	Soil	Duplicate		X												
	B11A-2.5	416293	6/13/2019 8:36	2.5	Soil	Primary		X												
B11B	B11B-1.5	416293	6/13/2019 8:47	1.5	Soil	Primary		X												
	B11B-2.5	416293	6/13/2019 8:51	2.5	Soil	Primary		X												
B11BB	B11BB-2.5	418214	8/12/2019 0:00	2.5	Soil	Primary		X												
B11C	B11C-1.5	416293	6/13/2019 8:31	1.5	Soil	Primary		X												
	B11C-2.5	416293	6/13/2019 8:36	2.5	Soil	Primary		X												
B11D	B11D-1.5	416293	6/13/2019 8:50	1.5	Soil	Primary		X												
	B11D-2.5	416293	6/13/2019 9:01	2.5	Soil	Primary		X												
B11DD	B11DD-1.5	418214	8/12/2019 0:00	1.5	Soil	Primary		X												
B11DDD	B11-DDD-1.5	421801	11/23/2019 11:05	1.5	Soil	Primary		X												
	B11-DDD-1.5	421801	11/23/2019 11:05	1.5	TCLP Leach	Primary													X	
	B11-DDD-1.5	421801	11/23/2019 11:05	1.5	WET Leach	Primary														X
B12	B12-0.5	T183212	10/20/2018 10:20	0.5	Soil	Primary		X	X											X
	B12-1.5	T183212	10/20/2018 10:21	1.5	Soil	Primary		X	X											
	B12-2.5	T183212	10/20/2018 10:22	2.5	Soil	Primary		X	X											
B12A	B12A-0.5	416293	6/13/2019 12:41	0.5	Soil	Primary		X												
	B12A-0.5-DUP	416293	6/13/2019 12:41	0.5	Soil	Duplicate		X												
B12AA	B12AA-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B12B	B12B-0.5	416293	6/13/2019 12:47	0.5	Soil	Primary		X												
B12BB	B12BB-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B12BBB	B12-BBB-0.5	421801	11/23/2019 11:58	0.5	Soil	Primary		X												
	B12-BBB-0.5-DUP	421801	11/23/2019 12:00	0.5	Soil	Duplicate		X												
	B12-BBB-0.5	421801	11/23/2019 11:58	0.5	TCLP Leach	Primary													X	
	B12-BBB-0.5	421801	11/23/2019 11:58	0.5	WET Leach	Primary														X
B12C	B12C-0.5	416293	6/13/2019 12:37	0.5	Soil	Primary		X												
B12CC	B12CC-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B12D	B12D-0.5	416293	6/13/2019 12:36	0.5	Soil	Primary		X												
B12DD	B12DD-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B13	B13-0.5	T183211	10/20/2018 10:25	0.5	Soil	Primary		X	X											
	B13-0.5-DUP	T183211	10/20/2018 10:25	0.5	Soil	Duplicate		X	X											
	B13-1.5	T183211	10/20/2018 10:30	1.5	Soil	Primary		X	X											
	B13-2.5	T183211	10/20/2018 10:32	2.5	Soil	Primary		X	X											
B14	B14-0.5	T183212	10/20/2018 10:35	0.5	Soil	Primary		X	X											
	B14-1.5	T183212	10/20/2018 10:36	1.5	Soil	Primary		X	X											
	B14-2.5	T183212	10/20/2018 10:37	2.5	Soil	Primary		X	X											
B15	B15-0.5	T183211	10/20/2018 10:50	0.5	Soil	Primary		X	X	X										
	B15-1.5	T183211	10/20/2018 10:55	1.5	Soil	Primary		X	X	X										
	B15-2.5	T183211	10/20/2018 11:00	2.5	Soil	Primary		X	X	X										
B16	B16-0.5	T182803	9/10/2018 14:50	0.5	Soil	Primary		X	X											
	B16-1.5	T182803	9/10/2018 14:53	1.5	Soil	Primary		X	X											
	B16-2.5	T182803	9/10/2018 14:55	2.5	Soil	Primary		X	X											
B17	B17-0.5	T182803	9/10/2018 14:09	0.5	Soil	Primary		X	X											
	B17-1.5	T182803	9/10/2018 14:10	1.5	Soil	Primary		X	X											
	B17-2.5	T182803	9/10/2018 14:12	2.5	Soil	Primary		X	X											
B18	B18-0.5	T182898	9/19/2018 14:55	0.5	Soil	Primary		X	X											
	B18-1.5	T182898	9/19/2018 14:57	1.5	Soil	Primary		X	X											
	B18-2.5	T182898	9/19/2018 15:00	2.5	Soil	Primary		X	X											X
B18A	B18A-2.5	416293	6/13/2019 9:50	2.5	Soil	Primary		X												
B18B	B18B-2.5	416293	6/13/2019 9:30	2.5	Soil	Primary		X												
	B18B-2.5-DUP	416293	6/13/2019 9:30	2.5	Soil	Duplicate		X												
B18C	B18C-2.5	416293	6/13/2019 9:43	2.5	Soil	Primary		X												
B18D	B18D-2.5	416293	6/13/2019 9:35	2.5	Soil	Primary		X												
B19	B19-0.5	T183212	10/20/2018 9:40	0.5	Soil	Primary		X	X											
	B19-0.5-dup	T183212	10/20/2018 9:40	0.5	Soil	Duplicate		X	X											
	B19-1.5	T183212	10/20/2018 9:41	1.5	Soil	Primary		X	X											
	B19-1.5-dup	T183212	10/20/2018 9:41	1.5	Soil	Duplicate		X	X											
	B19-2.5	T183212	10/20/2018 9:42	2.5	Soil	Primary		X	X											
	B19-2.5dup	T183212	10/20/2018 9:42	2.5	Soil	Duplicate		X	X											
B20	B20-0.5	T183454	11/19/2018 11:30	0.5	Soil	Primary		X	X											
	B20-1.5	T183454	11/19/2018 11:32	1.5	Soil	Primary		X	X											
	B20-2.5	T183454	11/19/2018 11:34	2.5	Soil	Primary		X	X											

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B20A	B20A-0.5	416293	6/13/2019 8:12	0.5	Soil	Primary		X												
	B20A-0.5-DUP	416293	6/13/2019 8:12	0.5	Soil	Duplicate		X												
B20B	B20B-0.5	416293	6/13/2019 8:11	0.5	Soil	Primary		X												
B20BB	B20BB-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B20BBB	B20-BBB-0.5	421801	11/23/2019 11:37	0.5	Soil	Primary		X												
	B20-BBB-0.5-DUP	421801	11/23/2019 13:39	0.5	Soil	Duplicate		X												
B20C	B20C-0.5	416293	6/13/2019 8:14	0.5	Soil	Primary		X												
B20D	B20D-0.5	416293	6/13/2019 8:16	0.5	Soil	Primary		X												
B21	B21-0.5	T183454	11/19/2018 11:45	0.5	Soil	Primary		X	X											
	B21-1.5	T183454	11/19/2018 11:47	1.5	Soil	Primary		X	X											
	B21-2.5	T183454	11/19/2018 11:49	2.5	Soil	Primary		X	X											
SV22	SV22-5.0'	F-0170	8/31/2018 11:16	5	Soil Gas	Primary											X			
	SV22-15.0'	F-0170	8/31/2018 11:36	15	Soil Gas	Primary											X			
SV23	SV23-5.0'	F-0170	8/31/2018 11:59	5	Soil Gas	Primary											X			
	SV23-15.0'	F-0170	8/31/2018 12:12	15	Soil Gas	Primary											X			
SV24	SV24-5.0'	F-0170	8/31/2018 12:33	5	Soil Gas	Primary											X			
	SV24-15.0'	F-0170	8/31/2018 12:48	15	Soil Gas	Primary											X			
B25	B25-0.5	T183212	10/20/2018 11:10	0.5	Soil	Primary		X	X											X
	B25-1.5	T183212	10/20/2018 11:11	1.5	Soil	Primary		X	X											
	B25-2.5	T183212	10/20/2018 11:12	2.5	Soil	Primary		X	X											
B25A	B25A-0.5	416293	6/13/2019 12:16	0.5	Soil	Primary		X												
	B25A-0.5-DUP	416293	6/13/2019 12:16	0.5	Soil	Duplicate		X												
B25B	B25B-0.5	416293	6/13/2019 12:25	0.5	Soil	Primary		X												
B25BB	B25-BB-0.5	418425	8/16/2019 0:00	0.5	Soil	Primary		X												
B25C	B25C-0.5	416293	6/13/2019 12:22	0.5	Soil	Primary		X												
B25D	B25D-0.5	416293	6/13/2019 12:20	0.5	Soil	Primary		X												
B25DD	B25-DD-0.5	418425	8/16/2019 0:00	0.5	Soil	Primary		X												
B26	B26-0.5	T183211	10/20/2018 11:05	0.5	Soil	Primary		X	X											
	B26-0.5-DUP	T183211	10/20/2018 11:05	0.5	Soil	Duplicate		X	X											
	B26-1.5	T183211	10/20/2018 11:10	1.5	Soil	Primary		X	X											
	B26-1.5-DUP	T183211	10/20/2018 11:10	1.5	Soil	Duplicate		X	X											
	B26-2.5	T183211	10/20/2018 11:15	2.5	Soil	Primary		X	X											
	B26-2.5-DUP	T183211	10/20/2018 11:15	2.5	Soil	Duplicate		X	X											
B27	B27-0.5	T182803	9/10/2018 14:42	0.5	Soil	Primary		X	X											
	B27-1.5	T182803	9/10/2018 14:23	1.5	Soil	Primary		X	X											
	B27-2.5	T182803	9/10/2018 14:25	2.5	Soil	Primary		X	X											
B28	B28-0.5	T183211	10/20/2018 13:42	0.5	Soil	Primary		X	X											
	B28-1.5	T183211	10/20/2018 13:44	1.5	Soil	Primary		X	X											
	B28-2.5	T183212	10/20/2018 13:45	2.5	Soil	Primary		X	X											
B29	B29-0.5	T183212	10/20/2018 13:33	0.5	Soil	Primary		X	X											
	B29-1.5	T183212	10/20/2018 13:34	1.5	Soil	Primary		X	X											
	B29-2.5	T183212	10/20/2018 13:35	2.5	Soil	Primary		X	X											

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B30	B30-0.5	T183212	10/20/2018 10:50	0.5	Soil	Primary		X	X											
	B30-1.5	T183212	10/20/2018 10:51	1.5	Soil	Primary		X	X											
	B30-2.5	T183212	10/20/2018 10:52	2.5	Soil	Primary		X	X											
B31	B31-0.5	T183212	10/20/2018 13:21	0.5	Soil	Primary		X	X											
	B31-0.5-dup	T183212	10/20/2018 13:21	0.5	Soil	Duplicate		X	X											
	B31-1.5	T183212	10/20/2018 13:22	1.5	Soil	Primary		X	X											
	B31-1.5-dup	T183212	10/20/2018 13:22	1.5	Soil	Duplicate		X	X											
	B31-2.5	T183212	10/20/2018 13:24	2.5	Soil	Primary		X	X											
	B31-2.5-dup	T183212	10/20/2018 13:24	2.5	Soil	Duplicate		X	X											
B32	B32-0.5	T183211	10/20/2018 11:45	0.5	Soil	Primary		X	X	X										
	B32-1.5	T183211	10/20/2018 11:50	1.5	Soil	Primary		X	X	X										
	B32-2.5	T183211	10/20/2018 11:55	2.5	Soil	Primary		X	X	X										
B41	B41-0.5	T183211	10/20/2018 13:57	0.5	Soil	Primary		X	X											
	B41-1.5	T183211	10/20/2018 13:59	1.5	Soil	Primary		X	X											
	B41-2.5	T183211	10/20/2018 14:01	2.5	Soil	Primary		X	X											
B42	B42-0.5	T183211	10/20/2018 14:00	0.5	Soil	Primary		X	X											
B43	B43-0.5	T183211	10/20/2018 13:40	0.5	Soil	Primary		X	X	X										
	B43-1.5	T183211	10/20/2018 13:45	1.5	Soil	Primary		X	X	X										
	B43-2.5	T183211	10/20/2018 13:50	2.5	Soil	Primary		X	X	X										
B44	B44-0.5	T183211	10/20/2018 13:20	0.5	Soil	Primary		X	X											
	B44-1.5	T183211	10/20/2018 13:30	1.5	Soil	Primary		X	X											
	B44-2.5	T183211	10/20/2018 13:33	2.5	Soil	Primary		X	X											
B45	B45-0.5	T183211	10/20/2018 12:00	0.5	Soil	Primary	X						X	X	X					
	B45-1.5	T183211	10/20/2018 12:10	1.5	Soil	Primary	X						X	X	X					
	B45-2.5	T183211	10/20/2018 12:15	2.5	Soil	Primary	X						X	X	X					
B46	B46-0.5	T183212	10/20/2018 12:30	0.5	Soil	Primary	X			X			X	X	X					
	B46-0.5dup	T183212	10/20/2018 12:30	0.5	Soil	Duplicate	X			X			X	X	X					
	B46-1.5	T183212	10/20/2018 12:32	1.5	Soil	Primary	X			X			X	X	X					
	B46-1.5dup	T183212	10/20/2018 12:32	1.5	Soil	Duplicate	X			X			X	X	X					
	B46-2.5	T183212	10/20/2018 12:36	2.5	Soil	Primary	X			X			X	X	X					
	B46-2.5dup	T183212	10/20/2018 12:36	2.5	Soil	Duplicate	X			X			X	X	X					
B47	B47-0.5	T183211	10/20/2018 14:15	0.5	Soil	Primary		X	X											
	B47-1.5	T183211	10/20/2018 14:17	1.5	Soil	Primary		X	X											
	B47-2.5	T183211	10/20/2018 14:18	2.5	Soil	Primary		X	X											
B48	B48-0.5	T182898	9/19/2018 14:40	0.5	Soil	Primary		X	X											
	B48-1.5	T182898	9/19/2018 14:43	1.5	Soil	Primary		X	X											
	B48-2.5	T182898	9/19/2018 14:45	2.5	Soil	Primary		X	X											
B49	B49-0.5	T183211	10/20/2018 14:30	0.5	Soil	Primary		X	X											
	B49-1.5	T183211	10/20/2018 14:30	1.5	Soil	Primary		X	X											
	B49-2.5	T183211	10/20/2018 14:30	2.5	Soil	Primary		X	X											

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LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B50	B50-0.5	T183454	11/19/2018 12:00	0.5	Soil	Primary		X	X											
	B50-1.5	T183454	11/19/2018 12:02	1.5	Soil	Primary		X	X											
	B50-2.5	T183454	11/19/2018 12:04	2.5	Soil	Primary		X	X											
B51	B51-0.5	T183211	10/20/2018 9:30	0.5	Soil	Primary		X	X	X										
	B51-0.5-DUP	T183211	10/20/2018 9:30	0.5	Soil	Duplicate		X	X	X										
	B51-1.5	T183211	10/20/2018 9:40	1.5	Soil	Primary		X	X	X										
	B51-1.5-DUP	T183211	10/20/2018 9:40	1.5	Soil	Duplicate		X	X	X										
B52	B52-0.5	T183212	10/20/2018 9:05	0.5	Soil	Primary		X	X											
	B52-1.5	T183212	10/20/2018 9:06	1.5	Soil	Primary		X	X											
	B52-2.5	T183212	10/20/2018 9:07	2.5	Soil	Primary		X	X											
B53	B53-0.5	T182803	9/10/2018 8:46	0.5	Soil	Primary		X	X											
	B53-1.5	T182803	9/10/2018 8:47	1.5	Soil	Primary		X	X											
	B53-2.5	T182803	9/10/2018 8:48	2.5	Soil	Primary		X	X											
	B53-5.0	T182803	9/10/2018 8:40	5	Soil	Primary	X						X	X	X					
	B53-10.0	T182803	9/10/2018 8:45	10	Soil	Primary	X						X	X	X					
	B53-15.0	T182803	9/10/2018 8:50	15	Soil	Primary	X						X	X	X					
B53A	B53A - 5.0	416244	6/12/2019 9:55	5	Soil	Primary	X													
	B53A - 10.0	416244	6/12/2019 11:45	10	Soil	Primary	X	X												
	B53A - 15.0	416244	6/12/2019 11:47	15	Soil	Primary	X													
B53B	B53B - 5.0	416244	6/12/2019 9:43	5	Soil	Primary	X													
	B53B - 10.0	416244	6/12/2019 11:29	10	Soil	Primary	X	X												
	B53B - 15.0	416244	6/12/2019 11:32	15	Soil	Primary	X													
B53C	B53C - 5.0	416244	6/12/2019 9:30	5	Soil	Primary	X													
	B53C - 10.0	416244	6/12/2019 11:00	10	Soil	Primary	X	X												
	B53C - 15.0	416244	6/12/2019 11:06	15	Soil	Primary	X													
B53D	B53D - 5.0	416244	6/12/2019 10:16	5	Soil	Primary	X													
	B53D - 10.0	416244	6/12/2019 10:36	10	Soil	Primary	X	X												
	B53D - 15.0	416244	6/12/2019 10:39	15	Soil	Primary	X													
SV53	SV53-5.0'	F-0173	9/10/2018 11:38	5	Soil Gas	Primary											X			
	SV53-5.0'-Dup	ST-12616	9/10/2018 12:01	5	Soil Gas	Duplicate												X		
	SV53-15.0'	F-0173	9/10/2018 11:18	15	Soil Gas	Primary											X			
SV54	SV54-5.0	D-1648	6/14/2019 10:52	5	Soil Gas	Primary											X			
	SV54-15.5	D-1648	6/14/2019 11:07	15.5	Soil Gas	Primary											X			
B55/SV55	B55-0.5	T183454	11/19/2018 9:55	0.5	Soil	Primary		X	X											
	B55-0.5-DUP	T183454	11/19/2018 9:56	0.5	Soil	Duplicate		X	X											
	B55-1.5	T183454	11/19/2018 9:57	1.5	Soil	Primary		X	X											
	B55-1.5-DUP	T183454	11/19/2018 9:58	1.5	Soil	Duplicate		X	X											
	B55-2.5	T183454	11/19/2018 9:59	2.5	Soil	Primary		X	X											
	B55-2.5-DUP	T183454	11/19/2018 10:00	2.5	Soil	Duplicate		X	X											
	B55-5.0	T183454	11/19/2018 10:05	5	Soil	Primary	X						X	X	X					
	B55-5.0-DUP	T183454	11/19/2018 10:06	5	Soil	Duplicate	X						X	X	X					
	SV55-10.0	T183494	11/21/2018 0:00	10	Soil	Primary	X						X	X	X					

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B55/SV55	SV55-15.0-SO	T183494	11/21/2018 0:00	15	Soil	Primary	X						X	X	X					
	SV55-5.0	D-1552	11/21/2018 7:58	5	Soil Gas	Primary											X			
	SV55-15.0-GS	D-1552	11/21/2018 0:26	15	Soil Gas	Primary											X			
B56	B56-0.5	T183454	11/19/2018 10:30	0.5	Soil	Primary		X	X											
	B56-1.5	T183454	11/19/2018 10:32	1.5	Soil	Primary		X	X											
	B56-2.5	T183454	11/19/2018 10:34	2.5	Soil	Primary		X	X											
	B56-5.0	T183454	11/19/2018 10:40	5	Soil	Primary	X						X	X	X					
SV56	SV56-10.0	T183494	11/21/2018 0:00	10	Soil	Primary	X						X	X	X					
	SV56-15.0-SO	T183494	11/21/2018 0:00	15	Soil	Primary	X						X	X	X					
	SV56-5.0	D-1552	11/21/2018 9:16	5	Soil Gas	Primary											X			
	SV56-15.0-GS	D-1552	11/21/2018 11:37	15	Soil Gas	Primary											X			
B57/SV57	B57-5.0	T182803	9/10/2018 7:50	5	Soil	Primary	X			X		X	X	X	X					
	B57-10.0	T182803	9/10/2018 7:55	10	Soil	Primary	X			X		X	X	X	X					
	B57-15.0	T182803	9/10/2018 8:00	15	Soil	Primary	X			X		X	X	X	X					
	SV57-5.0'	F-0173	9/10/2018 10:12	5	Soil Gas	Primary											X			
	SV57-15.0'	F-0173	9/10/2018 10:15	15	Soil Gas	Primary											X			
B57A	B57A - 5.0	416244	6/12/2019 13:37	5	Soil	Primary	X													
	B57A - 5.0 - DUP	416244	6/12/2019 13:37	5	Soil	Duplicate	X													
	B57A - 10.0	416244	6/12/2019 14:47	10	Soil	Primary	X	X												
	B57A - 15.0	416244	6/12/2019 14:53	15	Soil	Primary	X	X												
B57B	B57B - 5.0	416244	6/12/2019 13:47	5	Soil	Primary	X													
	B57B - 10.0	416244	6/12/2019 15:01	10	Soil	Primary	X	X												
	B57B - 15.0	416244	6/12/2019 15:06	15	Soil	Primary	X	X												
B57C	B57C - 5.0	416244	6/12/2019 13:29	5	Soil	Primary	X													
	B57C - 10.0	416244	6/12/2019 14:22	10	Soil	Primary	X	X												
	B57C - 15.0	416244	6/12/2019 14:25	15	Soil	Primary	X	X												
B57D	B57D - 5.0	416244	6/12/2019 13:18	5	Soil	Primary	X													
	B57D - 5.0 - DUP	416244	6/12/2019 13:18	5	Soil	Duplicate	X													
	B57D - 10.0	416244	6/12/2019 14:11	10	Soil	Primary	X	X												
	B57D - 10.0 - DUP	416244	6/12/2019 14:11	10	Soil	Duplicate		X												
	B57D - 15.0	416244	6/12/2019 14:14	15	Soil	Primary	X	X												
SV58	SV58-5.0'	F-0170	8/31/2018 14:19	5	Soil Gas	Primary											X			
	SV58-15.0'	F-0170	8/31/2018 14:28	15	Soil Gas	Primary											X			
SV59	SV59-5.0'	F-0170	8/31/2018 13:44	5	Soil Gas	Primary											X			
	SV59-15.0'	F-0170	8/31/2018 14:01	15	Soil Gas	Primary											X			
	SV59-15.0'-Dup	ST-12571	8/31/2018 14:10	15	Soil Gas	Duplicate												X		
B60	B60-0.5	T183454	11/19/2018 8:00	0.5	Soil	Primary		X	X											
	B60-1.5	T183454	11/19/2018 8:02	1.5	Soil	Primary		X	X											
	B60-2.5	T183454	11/19/2018 8:04	2.5	Soil	Primary		X	X											
	B60-5.0	T183454	11/19/2018 8:30	5	Soil	Primary	X						X	X	X					

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LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
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SV60	SV60-10.0	T183494	11/21/2018 0:00	10	Soil	Primary	X						X	X	X					
	SV60-15.0-SO	T183494	11/21/2018 0:00	15	Soil	Primary	X						X	X	X					
	SV60-5.0	D-1552	11/21/2018 8:48	5	Soil Gas	Primary											X			
	SV60-15.0-Dup	ST-13007	11/21/2018 13:17	15	Soil Gas	Duplicate												X		
	SV60-15.0-GS	D-1552	11/21/2018 13:13	15	Soil Gas	Primary											X			
B61/SV61	B61-0.5	T182803	9/10/2018 9:55	0.5	Soil	Primary		X	X											
	B61-1.5	T182803	9/10/2018 9:56	1.5	Soil	Primary		X	X											
	B61-2.5	T182803	9/10/2018 9:57	2.5	Soil	Primary		X	X											
	B61-5.0	T182803	9/10/2018 10:05	5	Soil	Primary	X						X	X	X					
	B61-10.0	T182803	9/10/2018 10:10	10	Soil	Primary	X						X	X	X					
	B61-15.0	T182803	9/10/2018 10:15	15	Soil	Primary	X						X	X	X					
	SV61-5.0'	F-0173	9/10/2018 12:42	5	Soil Gas	Primary											X			
	SV61-15.0'	F-0173	9/10/2018 14:29	15	Soil Gas	Primary											X			
B61A	B61A-10.0	416293	6/13/2019 7:47	10	Soil	Primary	X	X												
B61B	B61B-10.0	416293	6/13/2019 7:31	10	Soil	Primary	X	X												
	B61B-10.0-DUP	416293	6/13/2019 7:31	10	Soil	Duplicate	X	X												
B62	B62-0.5	T183454	11/19/2018 8:45	0.5	Soil	Primary		X	X											
	B62-1.5	T183454	11/19/2018 8:47	1.5	Soil	Primary		X	X											
	B62-2.5	T183454	11/19/2018 8:49	2.5	Soil	Primary		X	X											
	B62-5.0	T183454	11/19/2018 8:55	5	Soil	Primary	X						X	X	X					
SV62	SV62-10.0	T183494	11/21/2018 0:00	10	Soil	Primary	X						X	X	X					
	SV62-15.0-SO	T183494	11/21/2018 0:00	15	Soil	Primary	X						X	X	X					
	SV62-5.0	D-1552	11/21/2018 9:00	5	Soil Gas	Primary											X			
	SV62-5.0 REP	D-1552	11/21/2018 9:50	5	Soil Gas	Duplicate											X			
	SV62-15.0-GS	D-1552	11/21/2018 13:34	15	Soil Gas	Primary											X			
B63	B63-0.5	T182898	9/19/2018 12:25	0.5	Soil	Primary		X	X											
	B63-1.5	T182898	9/19/2018 12:28	1.5	Soil	Primary		X	X											
	B63-2.5	T182898	9/19/2018 12:30	2.5	Soil	Primary		X	X											
B63	B63-5.0(19)	T182898	9/19/2018 8:45	5	Soil	Primary	X						X	X	X					
	B63-10.0(24)	T182898	9/19/2018 8:48	10	Soil	Primary	X						X	X	X					
	B63-15.0(29)	T182898	9/19/2018 8:50	15	Soil	Primary	X						X	X	X					
	B64-19'	F-0180	9/19/2018 11:16	19	Soil Gas	Primary											X			
	B64-29'	F-0180	9/19/2018 11:35	29	Soil Gas	Primary											X			
	B64-29' REP	F-0180	9/19/2018 11:49	29	Soil Gas	Duplicate											X			
	B64-29'-Dup	ST-12676	9/19/2018 12:05	29	Soil Gas	Duplicate												X		

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LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B64/SV64	B64-0.5	T182898	9/19/2018 13:30	0.5	Soil	Primary		X	X											
	B64-1.5	T182898	9/19/2018 13:33	1.5	Soil	Primary		X	X											
	B64-2.5	T182898	9/19/2018 13:35	2.5	Soil	Primary		X	X											
	SV64-5.0 (17)	T183494	11/21/2018 0:00	5	Soil	Primary	X						X	X	X					
	SV64-10.0 (22)	T183494	11/21/2018 0:00	10	Soil	Primary	X						X	X	X					
	SV64-15.0 (27)	T183494	11/21/2018 0:00	15	Soil	Primary	X						X	X	X					
	SV64-20.0	D-1552	11/21/2018 10:30	20	Soil Gas	Primary											X			
	SV64-30.0	D-1552	11/21/2018 10:44	30	Soil Gas	Primary											X			
B65	B65-0.5	T182803	9/10/2018 9:10	0.5	Soil	Primary		X	X											
	B65-1.5	T182803	9/10/2018 9:11	1.5	Soil	Primary		X	X											
	B65-2.5	T182803	9/10/2018 9:12	2.5	Soil	Primary		X	X											
	B65-5.0	T182803	9/10/2018 9:15	5	Soil	Primary	X						X	X	X					
	B65-10.0	T182803	9/10/2018 9:20	10	Soil	Primary	X						X	X	X					
	B65-15.0	T182803	9/10/2018 9:25	15	Soil	Primary	X						X	X	X					
	SV65-5.0'	F-0173	9/10/2018 11:52	5	Soil Gas	Primary											X			
	SV65-15.0'	F-0173	9/10/2018 12:07	15	Soil Gas	Primary											X			
	SV65-15.0' REP	F-0173	9/10/2018 12:28	15	Soil Gas	Duplicate											X			
B66	B66-0.5	T182898	9/19/2018 12:45	0.5	Soil	Primary		X	X											
	B66-1.5	T182898	9/19/2018 12:48	1.5	Soil	Primary		X	X											
	B66-2.5	T182898	9/19/2018 12:50	2.5	Soil	Primary		X	X											
B67	B67-0.5	T183211	10/20/2018 14:43	0.5	Soil	Primary		X	X											
	B67-1.5	T183211	10/20/2018 14:45	1.5	Soil	Primary		X	X											
	B67-2.5	T183211	10/20/2018 14:47	2.5	Soil	Primary		X	X											
B68	B68-0.5	T183211	10/20/2018 8:10	0.5	Soil	Primary		X	X											
	B68-1.5	T183211	10/20/2018 8:12	1.5	Soil	Primary		X	X											
	B68-2.5	T183211	10/20/2018 8:15	2.5	Soil	Primary		X	X											
B69	B69-0.5	T183212	10/20/2018 8:10	0.5	Soil	Primary		X	X											
	B69-1.5	T183212	10/20/2018 8:11	1.5	Soil	Primary		X	X											
	B69-2.5	T183212	10/20/2018 8:12	2.5	Soil	Primary		X	X											
B70	B70-0.5	T183494	11/21/2018 0:00	0.5	Soil	Primary		X	X											
	B70-1.5	T183494	11/21/2018 0:00	1.5	Soil	Primary		X	X											
B70A	B70A-0.5	416293	6/13/2019 10:38	0.5	Soil	Primary	X		X	X										
	B70A-1.5	416293	6/13/2019 10:41	1.5	Soil	Primary	X		X											
B70B	B70B-0.5	416293	6/13/2019 10:36	0.5	Soil	Primary	X		X											
	B70B-1.5	416293	6/13/2019 10:39	1.5	Soil	Primary	X		X											
B70BB	B70BB-1.5	418214	8/12/2019 0:00	1.5	Soil	Primary		X												
B71	B71-0.5	T182898	9/19/2018 13:20	0.5	Soil	Primary		X	X											
B72	B72-0.5	T183211	10/20/2018 14:45	0.5	Soil	Primary		X	X	X										
	B72-1.5	T183211	10/20/2018 14:50	1.5	Soil	Primary		X	X	X										
	B72-2.5	T183211	10/20/2018 14:55	2.5	Soil	Primary		X	X	X										

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Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B73	B73-0.5	T182898	9/19/2018 14:10	0.5	Soil	Primary		X	X											
	B73-1.5	T182898	9/19/2018 14:13	1.5	Soil	Primary		X	X											
	B73-2.5	T182898	9/19/2018 14:15	2.5	Soil	Primary		X	X											
B74	B74-0.5	T182898	9/19/2018 14:25	0.5	Soil	Primary		X	X											
	B74-1.5	T182898	9/19/2018 14:27	1.5	Soil	Primary		X	X											
	B74-2.5	T182898	9/19/2018 14:30	2.5	Soil	Primary		X	X											
B79	B79-0.5	416329	6/14/2019 7:54	0.5	Soil	Primary		X	X	X										
	B79-0.5-DUP	416329	6/14/2019 7:54	0.5	Soil	Duplicate		X	X											
	B79-1.5	416329	6/14/2019 7:56	1.5	Soil	Primary		X	X											
	B79-2.5	416329	6/14/2019 8:01	2.5	Soil	Primary		X	X											
B80	B80-0.5	416329	6/14/2019 8:18	0.5	Soil	Primary		X	X											
	B80-1.5	416329	6/14/2019 8:21	1.5	Soil	Primary		X	X											
	B80-2.5	416329	6/14/2019 8:25	2.5	Soil	Primary		X	X											
B81	B81-0.5	416329	6/14/2019 8:10	0.5	Soil	Primary		X	X	X										
	B81-0.5-DUP	416329	6/14/2019 8:10	0.5	Soil	Duplicate		X	X											
	B81-1.5	416329	6/14/2019 8:11	1.5	Soil	Primary		X	X											
	B81-2.5	416329	6/14/2019 8:13	2.5	Soil	Primary		X	X											
B82	B82-0.5	416329	6/14/2019 8:32	0.5	Soil	Primary		X	X											
	B82-1.5	416329	6/14/2019 8:34	1.5	Soil	Primary		X	X											
	B82-2.5	416329	6/14/2019 8:36	2.5	Soil	Primary		X	X											
B83	B83-0.5	416329	6/14/2019 7:39	0.5	Soil	Primary		X	X	X										
	B83-0.5-DUP	416329	6/14/2019 7:39	0.5	Soil	Duplicate		X	X											
	B83-1.5	416329	6/14/2019 7:43	1.5	Soil	Primary		X	X											
	B83-2.5	416329	6/14/2019 7:45	2.5	Soil	Primary		X	X											
B83A	B83AA-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B83B	B83BB-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B83C	B83CC-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B83D	B83DD-0.5	418214	8/12/2019 0:00	0.5	Soil	Primary		X												
B84	B84-0.5	416329	6/14/2019 9:36	0.5	Soil	Primary		X	X											
	B84-1.5	416329	6/14/2019 9:40	1.5	Soil	Primary		X	X											
	B84-2.5	416329	6/14/2019 9:42	2.5	Soil	Primary		X	X											
B85	B85-0.5	416329	6/14/2019 9:01	0.5	Soil	Primary		X	X	X			X	X	X					
	B85-0.5-DUP	416329	6/14/2019 9:04	0.5	Soil	Duplicate		X	X				X	X	X					
	B85-1.5	416329	6/14/2019 9:06	1.5	Soil	Primary		X	X				X	X	X					
	B85-2.5	416329	6/14/2019 9:09	2.5	Soil	Primary		X	X				X	X	X					
B86	B86-0.5	416329	6/14/2019 9:17	0.5	Soil	Primary		X	X				X	X	X					
	B86-1.5	416329	6/14/2019 9:20	1.5	Soil	Primary		X	X				X	X	X					
	B86-2.5	416329	6/14/2019 9:24	2.5	Soil	Primary		X	X				X	X	X					
B90	B90-0.5	T183212	10/20/2018 8:17	0.5	Soil	Primary		X	X											
	B90-1.5	T183212	10/20/2018 8:18	1.5	Soil	Primary		X	X											
	B90-2.5	T183212	10/20/2018 8:19	2.5	Soil	Primary		X	X											

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B91	B91-0.5	T183211	10/20/2018 8:30	0.5	Soil	Primary		X	X											
	B91-1.5	T183211	10/20/2018 8:35	1.5	Soil	Primary		X	X											
	B91-2.5	T183211	10/20/2018 8:40	2.5	Soil	Primary		X	X											
B91A	B91A-1.5	416293	6/13/2019 10:08	1.5	Soil	Primary		X												X
	B91A-1.5-DUP	416293	6/13/2019 10:08	1.5	Soil	Duplicate		X												
B91B	B91B-1.5	416293	6/13/2019 10:14	1.5	Soil	Primary		X												
B91BB	B91BB-1.5	418214	8/12/2019 0:00	1.5	Soil	Primary		X												
B91C	B91C-1.5	416293	6/13/2019 10:07	1.5	Soil	Primary		X												
B92	B92-0.5	T183211	10/20/2018 8:42	0.5	Soil	Primary		X	X											
	B92-0.5-DUP	T183211	10/20/2018 8:42	0.5	Soil	Duplicate		X	X											
	B92-1.5	T183211	10/20/2018 8:45	1.5	Soil	Primary		X	X											
	B92-1.5-DUP	T183211	10/20/2018 8:45	1.5	Soil	Duplicate		X	X											
	B92-2.5	T183211	10/20/2018 8:50	2.5	Soil	Primary		X	X											
	B92-2.5-DUP	T183211	10/20/2018 8:50	2.5	Soil	Duplicate		X	X											
B93	B93-0.5	T183212	10/20/2018 8:40	0.5	Soil	Primary		X	X											
	B93-1.5	T183212	10/20/2018 8:41	1.5	Soil	Primary		X	X											
	B93-2.5	T183212	10/20/2018 8:42	2.5	Soil	Primary		X	X											
B94	B94-0.5	416293	6/13/2019 13:17	0.5	Soil	Primary		X	X											
	B94-1.5	416293	6/13/2019 13:21	1.5	Soil	Primary		X	X											
	B94-2.5	416293	6/13/2019 13:24	2.5	Soil	Primary		X	X											
B95	B95-0.5	416293	6/13/2019 13:33	0.5	Soil	Primary		X	X											
	B95-1.5	416293	6/13/2019 13:37	1.5	Soil	Primary		X	X											
	B95-2.5	416293	6/13/2019 13:40	2.5	Soil	Primary		X	X											
B96	B96-0.5	416293	6/13/2019 13:51	0.5	Soil	Primary		X	X											
	B96-1.5	416293	6/13/2019 13:54	1.5	Soil	Primary		X	X											
	B96-2.5	416293	6/13/2019 13:56	2.5	Soil	Primary		X	X											
B97	B97-0.5	416293	6/13/2019 14:03	0.5	Soil	Primary		X	X											
	B97-1.5	416293	6/13/2019 14:05	1.5	Soil	Primary		X	X											
	B97-2.5	416293	6/13/2019 14:11	2.5	Soil	Primary		X	X											
B98	B98-0.5	416329	6/14/2019 11:20	0.5	Soil	Primary	X	X	X						X	X				
	B98-1.5	416329	6/14/2019 11:22	1.5	Soil	Primary	X	X	X						X	X				
	B98-2.5	416329	6/14/2019 11:27	2.5	Soil	Primary	X	X	X						X	X				
B99	B99-0.5	416329	6/14/2019 10:55	0.5	Soil	Primary	X	X	X						X	X				
	B99-0.5-DUP	416329	6/14/2019 10:55	0.5	Soil	Duplicate	X	X	X						X	X				
	B99-1.5	416329	6/14/2019 10:57	1.5	Soil	Primary	X	X	X						X	X				
	B99-2.5	416329	6/14/2019 11:00	2.5	Soil	Primary	X	X	X						X	X				
B100	B100-0.5	416329	6/14/2019 10:40	0.5	Soil	Primary	X	X	X						X	X				
	B100-1.5	416329	6/14/2019 10:43	1.5	Soil	Primary	X	X	X						X	X				
	B100-2.5	416329	6/14/2019 10:45	2.5	Soil	Primary	X	X	X						X	X				

Table 1
Sample Matrix
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
B101	B101-0.5	416329	6/14/2019 10:04	0.5	Soil	Primary	X	X	X	X			X	X						
	B101-0.5-DUP	416329	6/14/2019 10:05	0.5	Soil	Duplicate	X	X	X				X	X						
	B101-1.5	416329	6/14/2019 10:10	1.5	Soil	Primary	X	X	X				X	X						
	B101-2.5	416329	6/14/2019 10:12	2.5	Soil	Primary	X	X	X				X	X						
B102	B102-0.5	416329	6/14/2019 10:15	0.5	Soil	Primary	X	X	X				X	X						
	B102-1.5	416329	6/14/2019 10:19	1.5	Soil	Primary	X	X	X				X	X						
	B102-2.5	416329	6/14/2019 10:21	2.5	Soil	Primary	X	X	X				X	X						
B103	B103-0.5	416329	6/14/2019 12:35	0.5	Soil	Primary		X	X	X										
	B103-0.5-DUP	416329	6/14/2019 12:35	0.5	Soil	Duplicate		X	X											
	B103-1.5	416329	6/14/2019 12:37	1.5	Soil	Primary		X	X											
	B103-2.5	416329	6/14/2019 12:39	2.5	Soil	Primary		X	X											
B104	B104-0.5	416329	6/14/2019 12:28	0.5	Soil	Primary		X	X											
	B104-1.5	416329	6/14/2019 12:30	1.5	Soil	Primary		X	X											
	B104-2.5	416329	6/14/2019 12:32	2.5	Soil	Primary		X	X											
B105	B105-0.5	416329	6/14/2019 12:20	0.5	Soil	Primary		X	X	X										
	B105-0.5-DUP	416329	6/14/2019 12:24	0.5	Soil	Duplicate		X	X											
	B105-1.5	416329	6/14/2019 12:20	1.5	Soil	Primary		X	X											
	B105-2.5	416329	6/14/2019 12:23	2.5	Soil	Primary		X	X											
B106	B106-0.5	416329	6/14/2019 12:10	0.5	Soil	Primary		X	X											
	B106-1.5	416329	6/14/2019 12:12	1.5	Soil	Primary		X	X											
	B106-2.5	416329	6/14/2019 12:14	2.5	Soil	Primary		X	X											
B107	B107-0.5	416329	6/14/2019 11:59	0.5	Soil	Primary		X	X	X										
	B107-0.5-DUP	416329	6/14/2019 11:59	0.5	Soil	Duplicate				X										
	B107-1.5	416329	6/14/2019 12:01	1.5	Soil	Primary		X	X											
	B107-2.5	416329	6/14/2019 12:06	2.5	Soil	Primary		X	X											
B108	B108-0.5	416329	6/14/2019 11:49	0.5	Soil	Primary		X	X											
	B108-1.5	416329	6/14/2019 11:51	1.5	Soil	Primary		X	X											
	B108-2.5	416329	6/14/2019 11:53	2.5	Soil	Primary		X	X											
B109	B109-0.5	416329	6/14/2019 11:39	0.5	Soil	Primary		X	X											
	B109-1.5	416329	6/14/2019 11:40	1.5	Soil	Primary		X	X											
	B109-2.5	416329	6/14/2019 11:42	2.5	Soil	Primary		X	X											
SV110	SV110-5.0	D-1648	6/14/2019 11:28	5	Soil Gas	Primary											X			
	SV110-15.5	D-1648	6/14/2019 11:45	15.5	Soil Gas	Primary											X			
	SV110-15.5 REP	D-1648	6/14/2019 11:50	15.5	Soil Gas	Duplicate											X			
SV111	SV111-5.0	D-1648	6/14/2019 12:21	5	Soil Gas	Primary											X			
	SV111-5.0-Dup	ST-13880	6/14/2019 13:23	5	Soil Gas	Duplicate												X		
	SV111-15.5	D-1648	6/14/2019 12:39	15.5	Soil Gas	Primary											X			
SV112	SV112-5.0	D-1648	6/14/2019 13:00	5	Soil Gas	Primary											X			
	SV112-15.5	D-1648	6/14/2019 13:13	15.5	Soil Gas	Primary											X			
SV113	SV113-5.0	ST-14158	8/14/2019 11:34	5	Soil Gas	Primary												X		
	SV113-15.0	ST-14158	8/14/2019 11:30	15	Soil Gas	Primary												X		

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							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
SV114	SV114-5.0	ST-14158	8/14/2019 12:07	5	Soil Gas	Primary												X		
	SV114-15.0	ST-14158	8/14/2019 11:56	15	Soil Gas	Primary												X		
SV115	SV115-5.0	ST-14158	8/14/2019 12:19	5	Soil Gas	Primary												X		
	SV115-15.0	ST-14158	8/14/2019 12:21	15	Soil Gas	Primary												X		
SV116	SV116-5.0	ST-14158	8/14/2019 13:01	5	Soil Gas	Primary												X		
	SV116-15.0	ST-14158	8/14/2019 12:48	15	Soil Gas	Primary												X		
	SV116-15.0 REP	ST-14158	8/14/2019 12:57	15	Soil Gas	Duplicate												X		
SV117	SV117-5.0	421801	11/23/2019 8:35	5	Soil	Primary									X					
	SV117-10.0	421801	11/23/2019 8:45	10	Soil	Primary									X					
	SV117-15.0	421801	11/23/2019 9:00	15	Soil	Primary									X					
	SV117-15.0-DUP	421801	11/23/2019 9:02	15	Soil	Duplicate									X					
	SV117-25.0	421801	11/23/2019 9:05	25	Soil	Primary									X					
	SV117-5	E911113	11/25/2019 0:00	5	Soil Gas	Primary												X		
	SV117-10	E911113	11/25/2019 0:00	10	Soil Gas	Primary												X		
	SV117-15	E911113	11/25/2019 0:00	15	Soil Gas	Primary												X		
	SV117-25	E911113	11/25/2019 0:00	25	Soil Gas	Primary												X		
SV118	SV118-5.0	421801	11/23/2019 9:40	5	Soil	Primary									X					
	SV118-10.0	421801	11/23/2019 10:00	10	Soil	Primary									X					
	SV118-15.0	421801	11/23/2019 10:04	15	Soil	Primary									X					
	SV118-25.0	421801	11/23/2019 10:12	25	Soil	Primary									X					
	SV118-5	E911115	11/25/2019 0:00	5	Soil Gas	Primary												X		
	SV118-5-Rep	E911115	11/25/2019 0:00	5	Soil Gas	Duplicate												X		
	SV118-10	E911113	11/25/2019 0:00	10	Soil Gas	Primary												X		
	SV118-15	E911113	11/25/2019 0:00	15	Soil Gas	Primary												X		
	SV118-25	E911113	11/25/2019 0:00	25	Soil Gas	Primary												X		
	SV118-25-Rep	E911113	11/25/2019 0:00	25	Soil Gas	Duplicate												X		
SV119	SV119-5.0	421801	11/23/2019 9:30	5	Soil	Primary									X					
	SV119-10.0	421801	11/23/2019 13:24	10	Soil	Primary									X					
	SV119-15.0	421801	11/23/2019 13:30	15	Soil	Primary									X					
	SV119-25.0	421801	11/23/2019 14:00	25	Soil	Primary									X					
	SV119-5	E911115	11/25/2019 0:00	5	Soil Gas	Primary												X		
	SV119-10	E911113	11/25/2019 0:00	10	Soil Gas	Primary												X		
	SV119-15	E911113	11/25/2019 0:00	15	Soil Gas	Primary												X		
	SV119-25	E911113	11/25/2019 0:00	25	Soil Gas	Primary												X		

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LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
SV120	SV120-5.0	421801	11/23/2019 11:10	5	Soil	Primary									X					
	SV120-5.0-DUP	421801	11/23/2019 11:12	5	Soil	Duplicate									X					
	SV120-10.0	421801	11/23/2019 11:25	10	Soil	Primary									X					
	SV120-15.0	421801	11/23/2019 11:30	15	Soil	Primary									X					
	SV120-25.0	421801	11/23/2019 11:40	25	Soil	Primary									X					
	SV120-5	E911115	11/25/2019 0:00	5	Soil Gas	Primary												X		
	SV120-10	E911113	11/25/2019 0:00	10	Soil Gas	Primary												X		
	SV120-15	E911113	11/25/2019 0:00	15	Soil Gas	Primary												X		
	SV120-25	E911113	11/25/2019 0:00	25	Soil Gas	Primary												X		
SV121	SV121-5.0	421801	11/23/2019 10:55	5	Soil	Primary									X					
	SV121-10.0	421801	11/23/2019 12:57	10	Soil	Primary									X					
	SV121-15.0	421801	11/23/2019 13:02	15	Soil	Primary									X					
	SV121-25.0	421801	11/23/2019 13:07	25	Soil	Primary									X					
	SV121-5	E911115	11/25/2019 0:00	5	Soil Gas	Primary												X		
	SV121-10	E911113	11/25/2019 0:00	10	Soil Gas	Primary												X		
	SV121-15	E911113	11/25/2019 0:00	15	Soil Gas	Primary												X		
	SV121-25	E911113	11/25/2019 0:00	25	Soil Gas	Primary												X		
SV122	SV122-5.0	421801	11/23/2019 13:42	5	Soil	Primary									X					
	SV122-10.0	421801	11/23/2019 13:45	10	Soil	Primary									X					
	SV122-15.0	421801	11/23/2019 13:50	15	Soil	Primary									X					
	SV122-25.0	421801	11/23/2019 13:55	25	Soil	Primary									X					
	SV122-25.0-DUP	421801	11/23/2019 13:57	25	Soil	Duplicate									X					
	SV122-5	E911115	11/25/2019 0:00	5	Soil Gas	Primary												X		
	SV122-5-Rep	E911115	11/25/2019 0:00	5	Soil Gas	Duplicate												X		
	SV122-10	E911113	11/25/2019 0:00	10	Soil Gas	Primary												X		
	SV122-15	E911113	11/25/2019 0:00	15	Soil Gas	Primary												X		
	SV122-25	E911113	11/25/2019 0:00	25	Soil Gas	Primary												X		
AB01	AB01-1.0	412613	2/18/2019 7:52	1	Soil	Primary		X												
	AB01-5.0	412613	2/18/2019 8:01	5	Soil	Primary		X												
	AB01-10.0	412613	2/18/2019 8:15	10	Soil	Primary		X												
	AB01-15.0	412613	2/18/2019 8:21	15	Soil	Primary		X												
	AB01-20.0	412613	2/18/2019 8:28	20	Soil	Primary		X												
	AB01-25.0	412613	2/18/2019 8:35	25	Soil	Primary		X												
	AB01-30.0	412613	2/18/2019 8:46	30	Soil	Primary		X												
AB02	AB02-1.0	412613	2/18/2019 8:48	1	Soil	Primary		X												
	AB02-5.0	412613	2/18/2019 8:52	5	Soil	Primary		X												
	AB02-10.0	412613	2/18/2019 9:00	10	Soil	Primary		X												
	AB02-15.0	412613	2/18/2019 9:05	15	Soil	Primary		X												
	AB02-15.0-DUP	412613	2/18/2019 9:05	15	Soil	Duplicate		X												
	AB02-20.0	412613	2/18/2019 9:10	20	Soil	Primary		X												
	AB02-25.0	412613	2/18/2019 9:15	25	Soil	Primary		X												
	AB02-29.0	412613	2/18/2019 9:30	29	Soil	Primary		X												

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							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
AB03	AB03-1.0	412613	2/18/2019 9:35	1	Soil	Primary		X												
	AB03-5.0	412613	2/18/2019 9:40	5	Soil	Primary		X												
	AB03-10.0	412613	2/18/2019 9:50	10	Soil	Primary		X												
	AB03-10.0-DUP	412613	2/18/2019 9:50	10	Soil	Duplicate		X												
	AB03-15.0	412613	2/18/2019 9:53	15	Soil	Primary		X												
	AB03-20.0	412613	2/18/2019 9:58	20	Soil	Primary		X												
	AB03-25.0	412613	2/18/2019 10:05	25	Soil	Primary		X												
	AB03-25.0-DUP	412613	2/18/2019 10:05	25	Soil	Duplicate		X												
	AB03-30.0	412613	2/18/2019 10:10	30	Soil	Primary		X												
AB04	AB04-1.0	412613	2/18/2019 11:36	1	Soil	Primary		X												
	AB04-5.0	412613	2/18/2019 11:49	5	Soil	Primary		X												
	AB04-5.0-DUP	412613	2/18/2019 11:49	5	Soil	Duplicate		X												
	AB04-10.0	412613	2/18/2019 12:03	10	Soil	Primary		X												
	AB04-15.0	412613	2/18/2019 12:11	15	Soil	Primary		X												
	AB04-20.0	412613	2/18/2019 12:26	20	Soil	Primary		X												
	AB04-25.0	412613	2/18/2019 12:46	25	Soil	Primary		X												
	AB04-30.0	412613	2/18/2019 12:54	30	Soil	Primary		X												
AB05	AB05-1.0	412613	2/18/2019 13:30	1	Soil	Primary		X												
	AB05-1.0-DUP	412613	2/18/2019 13:30	1	Soil	Duplicate		X												
	AB05-5.0	412613	2/18/2019 13:38	5	Soil	Primary		X												
	AB05-10.0	412613	2/18/2019 13:55	10	Soil	Primary		X												
	AB05-15.0	412613	2/18/2019 13:53	15	Soil	Primary		X												
	AB05-20.0	412613	2/18/2019 14:04	20	Soil	Primary		X												
	AB05-25.0	412613	2/18/2019 14:10	25	Soil	Primary		X												
	AB05-29.5	412613	2/18/2019 14:20	29.5	Soil	Primary		X												
AB06	AB06-1.0	412613	2/18/2019 15:55	1	Soil	Primary		X												
	AB06-5.0	412613	2/18/2019 16:00	5	Soil	Primary		X												
	AB06-10.0	412613	2/18/2019 16:10	10	Soil	Primary		X												
	AB06-15.0	412613	2/18/2019 16:15	15	Soil	Primary		X												
	AB06-20.0	412613	2/18/2019 16:20	20	Soil	Primary		X												
	AB06-25.0	412613	2/18/2019 16:25	25	Soil	Primary		X												
	AB06-30.0	412613	2/18/2019 16:30	30	Soil	Primary		X												
AB07	AB07-1.0	412613	2/18/2019 11:35	1	Soil	Primary		X												
	AB07-5.0	412613	2/18/2019 11:50	5	Soil	Primary		X												
	AB07-10.0	412613	2/18/2019 12:00	10	Soil	Primary		X												
	AB07-15.0	412613	2/18/2019 12:07	15	Soil	Primary		X												
	AB07-20.0	412613	2/18/2019 12:20	20	Soil	Primary		X												
	AB07-20.0-DUP	412613	2/18/2019 12:20	20	Soil	Duplicate		X												
	AB07-25.0	412613	2/18/2019 12:30	25	Soil	Primary		X												
	AB07-30.0	412613	2/18/2019 12:45	30	Soil	Primary		X												

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LAUSD Alexander Hamilton High School, Los Angeles, California

							Soil Samples										Soil Vapor Samples		Leaching Analyses	
Location	Sample ID	Analytical Report Number	Sampled Date and Time	Sample Depth	Matrix Type	Sample Type	Title 22 Metals EPA 6010B / 7471A *	As and/or Pb EPA 6020	OCPs EPA 8081	PCBs EPA 8082	PAHs EPA 8270C SIM)	SVOCs EPA 8270C	TPHg EPA 8015M / 5035	TPH d/mo EPA 8015B	VOCs EPA 8260B Soil	Dioxins/Furans EPA 8290	VOCs EPA8260B SV	VOCs EPA TO-15	EPA 6020_TCLP(EPA 6020_TCLP)	EPA 6020_WET(EPA 6020_WET)
AB08	AB08-1.0	412613	2/18/2019 14:52	1	Soil	Primary		X												
	AB08-5.0	412613	2/18/2019 15:05	5	Soil	Primary		X												
	AB08-10.0	412613	2/18/2019 15:25	10	Soil	Primary		X												
	AB08-15.0	412613	2/18/2019 15:30	15	Soil	Primary		X												
	AB08.20.0	412613	2/18/2019 15:35	20	Soil	Primary		X												
	AB08-25.0	412613	2/18/2019 15:40	25	Soil	Primary		X												
	AB08-29.5	412613	2/18/2019 15:41	29.5	Soil	Primary		X												
AB09	AB09-1.0	412613	2/18/2019 13:31	1	Soil	Primary		X												
	AB09-5.0	412613	2/18/2019 13:43	5	Soil	Primary		X												
	AB09-10.0	412613	2/18/2019 13:58	10	Soil	Primary		X												
	AB09-10.0-DUP	412613	2/18/2019 13:58	10	Soil	Duplicate		X												
	AB09-15.0	412613	2/18/2019 14:06	15	Soil	Primary		X												
	AB09-20.0	412613	2/18/2019 14:33	20	Soil	Primary		X												
	AB09-25.0	412613	2/18/2019 14:59	25	Soil	Primary		X												

Notes
* Primary samples analyzed for all Title 22 Metals. Step-out samples only analyzed for chemicals above screening levels.
OCPs = organochlorine pesticides
PCBs = polychlorinated biphenyls
PAHs = polyaromatic hydrocarbons
SIM = selective ion monitoring
TPH = total petroluem hydrocarbons
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds
EPA = United States Environmental Protection Agency

Table 2
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Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B02	5	B02-5.0	9/10/2018	T182803	<3	**21**	**120**	<1	<2	**34**	**19**	**29**	**13**	<0.1	<5	**29**	<5	<2	<2	**62**	**68**
	10	B02-10.0	9/10/2018	T182803	<3	**19**	**100**	<1	<2	**38**	**19**	**28**	**9.6**	<0.1	<5	**30**	<5	<2	<2	**64**	**61**
	15	B02-15.0	9/10/2018	T182803	<3	**21**	**53**	<1	<2	**24**	**15**	**22**	<3	<0.1	<5	**22**	<5	<2	<2	**40**	**39**
B03	0.5	B03-0.5	9/10/2018	T182803	-	**23**	-	-	-	-	-	-	**18**	-	-	-	-	-	-	-	-
	1.5	B03-1.5	9/10/2018	T182803	-	**17**	-	-	-	-	-	-	**300**	-	-	-	-	-	-	-	-
	2.5	B03-2.5	9/10/2018	T182803	-	**19**	-	-	-	-	-	-	**7.5**	-	-	-	-	-	-	-	-
B03A	1.5	B03A-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**7.38**	-	-	-	-	-	-	-	-
B03B	1.5	B03B-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**23.7**	-	-	-	-	-	-	-	-
B03C	1.5	B03C-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**105**	-	-	-	-	-	-	-	-
B03CC	1.5	B03-CC-1.5	8/16/2019	418425	-	-	-	-	-	-	-	-	**8.82**	-	-	-	-	-	-	-	-
B04	2.5	B04-2.5	9/19/2018	T182898	**16**	**23**	**200**	<1	<2	**42**	**18**	**38**	**13**	<0.1	<5	**40**	<5	<2	<2	**83**	**84**
		B04-2.5 DUP	9/19/2018	T182898	**9.8**	**20**	**160**	<1	<2	**42**	**17**	**38**	**8**	<0.1	<5	**43**	<5	<2	<2	**84**	**84**
	5	B04-5.0	9/19/2018	T182898	**7.4**	**16**	**150**	<1	<2	**39**	**17**	**34**	**6.3**	<0.1	<5	**36**	<5	<2	<2	**74**	**82**
B05	0.5	B05-0.5	8/31/2018	T182726	-	**17**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	1.5	B05-1.5	8/31/2018	T182726	-	**18**	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-
	2.5	B05-2.5	8/31/2018	T182726	-	**20**	-	-	-	-	-	-	**18**	-	-	-	-	-	-	-	-
	5	B05-5.0	8/31/2018	T182726	<3	**8.1**	**130**	<1	<2	**29**	**11**	**27**	<3	<0.1	<5	**25**	<5	<2	<2	**62**	**68**
	10	B05-10.0	8/31/2018	T182726	<3	**6.9**	**110**	<1	<2	**30**	**9.7**	**24**	<3	<0.1	<5	**24**	<5	<2	<2	**60**	**59**
	15	B05-15.0	8/31/2018	T182726	<3	**26**	**150**	<1	<2	**46**	**14**	**40**	**8.1**	<0.1	<5	**33**	<5	<2	<2	**90**	**86**
B06	0.5	B06-0.5	9/10/2018	T182803	-	**8.4**	-	-	-	-	-	-	**21**	-	-	-	-	-	-	-	-
	1.5	B06-1.5	9/10/2018	T182803	-	**20**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	2.5	B06-2.5	9/10/2018	T182803	-	**21**	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-
B07	0.5	B07-0.5	9/10/2018	T182803	-	**17**	-	-	-	-	-	-	**15**	-	-	-	-	-	-	-	-
	1.5	B07-1.5	9/10/2018	T182803	-	**14**	-	-	-	-	-	-	**9.9**	-	-	-	-	-	-	-	-
	2.5	B07-2.5	9/10/2018	T182803	-	**14**	-	-	-	-	-	-	**7.1**	-	-	-	-	-	-	-	-
B08	0.5	B08-0.5	9/10/2018	T182803	-	**12**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	1.5	B08-1.5	9/10/2018	T182803	-	**17**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
	2.5	B08-2.5	9/10/2018	T182803	-	**22**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
B09	0.5	B09-0.5	9/10/2018	T182803	-	**15**	-	-	-	-	-	-	**14**	-	-	-	-	-	-	-	-
	1.5	B09-1.5	9/10/2018	T182803	-	**19**	-	-	-	-	-	-	**9.9**	-	-	-	-	-	-	-	-
	2.5	B09-2.5	9/10/2018	T182803	-	**21**	-	-	-	-	-	-	**8.5**	-	-	-	-	-	-	-	-
B10	0.5	B10-0.5	9/10/2018	T182803	-	**18**	-	-	-	-	-	-	**90**	-	-	-	-	-	-	-	-
	1.5	B10-1.5	9/10/2018	T182803	-	**20**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	2.5	B10-2.5	9/10/2018	T182803	-	**22**	-	-	-	-	-	-	**9.9**	-	-	-	-	-	-	-	-
B10A	0.5	B10A-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**17.9**	-	-	-	-	-	-	-	-
		B10A-0.5-DUP	6/13/2019	416293	-	-	-	-	-	-	-	-	**15.7**	-	-	-	-	-	-	-	-
B10B	0.5	B10B-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**7.56**	-	-	-	-	-	-	-	-
B10C	0.5	B10C-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**21.7**	-	-	-	-	-	-	-	-

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					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B11	0.5	B11-0.5	10/20/2018	T183212	-	**21**	-	-	-	-	-	-	**9.9**	-	-	-	-	-	-	-	-
	1.5	B11-1.5	10/20/2018	T183212	-	**37**	-	-	-	-	-	-	**34**	-	-	-	-	-	-	-	-
	2.5	B11-2.5	10/20/2018	T183212	-	**44**	-	-	-	-	-	-	**40**	-	-	-	-	-	-	-	-
B11A	1.5	B11A-1.5	6/13/2019	416293	-	**3.93**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B11A-1.5-DUP	6/13/2019	416293	-	**9.12**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B11A-2.5	6/13/2019	416293	-	**15.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B11B	1.5	B11B-1.5	6/13/2019	416293	-	**26.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B11B-2.5	6/13/2019	416293	-	**40.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B11BB	2.5	B11BB-2.5	8/12/2019	418214	-	**16.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B11C	1.5	B11C-1.5	6/13/2019	416293	-	**87.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B11C-2.5	6/13/2019	416293	-	**29.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B11D	1.5	B11D-1.5	6/13/2019	416293	-	**36.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B11D-2.5	6/13/2019	416293	-	**16.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B11DD	1.5	B11DD-1.5	8/12/2019	418214	-	**42.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B11DDD	1.5	B11-DDD-1.5	11/23/2019	421801	-	**54.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B12	0.5	B12-0.5	10/20/2018	T183212	-	**5.3**	-	-	-	-	-	-	**270**	-	-	-	-	-	-	-	-
	1.5	B12-1.5	10/20/2018	T183212	-	**14**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
	2.5	B12-2.5	10/20/2018	T183212	-	**17**	-	-	-	-	-	-	**6.5**	-	-	-	-	-	-	-	-
B12A	0.5	B12A-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**136**	-	-	-	-	-	-	-	-
		B12A-0.5-DUP	6/13/2019	416293	-	-	-	-	-	-	-	-	**131**	-	-	-	-	-	-	-	-
B12AA	0.5	B12AA-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**9.71**	-	-	-	-	-	-	-	-
B12B	0.5	B12B-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**132**	-	-	-	-	-	-	-	-
B12BB	0.5	B12BB-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**190**	-	-	-	-	-	-	-	-
B12BBB	0.5	B12-BBB-0.5	11/23/2019	421801	-	-	-	-	-	-	-	-	**1030**	-	-	-	-	-	-	-	-
		B12-BBB-0.5-DUP	11/23/2019	421801	-	-	-	-	-	-	-	-	**32**	-	-	-	-	-	-	-	-
B12C	0.5	B12C-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**336**	-	-	-	-	-	-	-	-
B12CC	0.5	B12CC-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**6.09**	-	-	-	-	-	-	-	-
B12D	0.5	B12D-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**412**	-	-	-	-	-	-	-	-
B12DD	0.5	B12DD-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**92.5**	-	-	-	-	-	-	-	-
B13	0.5	B13-0.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**36**	-	-	-	-	-	-	-	-
		B13-0.5-DUP	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**7.9**	-	-	-	-	-	-	-	-
	1.5	B13-1.5	10/20/2018	T183211	-	**21**	-	-	-	-	-	-	**15**	-	-	-	-	-	-	-	-
	2.5	B13-2.5	10/20/2018	T183211	-	**16**	-	-	-	-	-	-	**16**	-	-	-	-	-	-	-	-

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					Metals																
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					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B14	0.5	B14-0.5	10/20/2018	T183212	-	**13**	-	-	-	-	-	-	**9.6**	-	-	-	-	-	-	-	-
	1.5	B14-1.5	10/20/2018	T183212	-	**16**	-	-	-	-	-	-	**7.3**	-	-	-	-	-	-	-	-
	2.5	B14-2.5	10/20/2018	T183212	-	**16**	-	-	-	-	-	-	**6.3**	-	-	-	-	-	-	-	-
B15	0.5	B15-0.5	10/20/2018	T183211	-	**13**	-	-	-	-	-	-	**7.5**	-	-	-	-	-	-	-	-
	1.5	B15-1.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**8**	-	-	-	-	-	-	-	-
	2.5	B15-2.5	10/20/2018	T183211	-	**22**	-	-	-	-	-	-	**56**	-	-	-	-	-	-	-	-
B16	0.5	B16-0.5	9/10/2018	T182803	-	**13**	-	-	-	-	-	-	**5.7**	-	-	-	-	-	-	-	-
	1.5	B16-1.5	9/10/2018	T182803	-	**21**	-	-	-	-	-	-	**8.9**	-	-	-	-	-	-	-	-
	2.5	B16-2.5	9/10/2018	T182803	-	**22**	-	-	-	-	-	-	**7.6**	-	-	-	-	-	-	-	-
B17	0.5	B17-0.5	9/10/2018	T182803	-	**15**	-	-	-	-	-	-	**29**	-	-	-	-	-	-	-	-
	1.5	B17-1.5	9/10/2018	T182803	-	**18**	-	-	-	-	-	-	**8.3**	-	-	-	-	-	-	-	-
	2.5	B17-2.5	9/10/2018	T182803	-	**23**	-	-	-	-	-	-	**9**	-	-	-	-	-	-	-	-
B18	0.5	B18-0.5	9/19/2018	T182898	-	**24**	-	-	-	-	-	-	**26**	-	-	-	-	-	-	-	-
	1.5	B18-1.5	9/19/2018	T182898	-	**14**	-	-	-	-	-	-	**6.1**	-	-	-	-	-	-	-	-
	2.5	B18-2.5	9/19/2018	T182898	-	**63**	-	-	-	-	-	-	**14**	-	-	-	-	-	-	-	-
B18A	2.5	B18A-2.5	6/13/2019	416293	-	**13.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B18B	2.5	B18B-2.5	6/13/2019	416293	-	**13.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B18B-2.5-DUP	6/13/2019	416293	-	**13.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B18C	2.5	B18C-2.5	6/13/2019	416293	-	**13.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B18D	2.5	B18D-2.5	6/13/2019	416293	-	**14.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B19	0.5	B19-0.5	10/20/2018	T183212	-	**22**	-	-	-	-	-	-	**18**	-	-	-	-	-	-	-	-
		B19-0.5-dup	10/20/2018	T183212	-	**15**	-	-	-	-	-	-	**16**	-	-	-	-	-	-	-	-
	1.5	B19-1.5	10/20/2018	T183212	-	**18**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
		B19-1.5-dup	10/20/2018	T183212	-	**18**	-	-	-	-	-	-	**9.3**	-	-	-	-	-	-	-	-
	2.5	B19-2.5	10/20/2018	T183212	-	**14**	-	-	-	-	-	-	**7.4**	-	-	-	-	-	-	-	-
		B19-2.5dup	10/20/2018	T183212	-	**21**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
B20	0.5	B20-0.5	11/19/2018	T183454	-	**62**	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-
	1.5	B20-1.5	11/19/2018	T183454	-	**20**	-	-	-	-	-	-	**7.5**	-	-	-	-	-	-	-	-
	2.5	B20-2.5	11/19/2018	T183454	-	**20**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
B20A	0.5	B20A-0.5	6/13/2019	416293	-	**4.84**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B20A-0.5-DUP	6/13/2019	416293	-	**17.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B20B	0.5	B20B-0.5	6/13/2019	416293	-	**88.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B20BB	0.5	B20BB-0.5	8/12/2019	418214	-	**97.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B20BBB	0.5	B20-BBB-0.5	11/23/2019	421801	-	**43.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B20-BBB-0.5-DUP	11/23/2019	421801	-	**56.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B20C	0.5	B20C-0.5	6/13/2019	416293	-	**22.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B20D	0.5	B20D-0.5	6/13/2019	416293	-	**5.44**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B21	0.5	B21-0.5	11/19/2018	T183454	-	**15**	-	-	-	-	-	-	**32**	-	-	-	-	-	-	-	-
	1.5	B21-1.5	11/19/2018	T183454	-	**19**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	2.5	B21-2.5	11/19/2018	T183454	-	**18**	-	-	-	-	-	-	**7.9**	-	-	-	-	-	-	-	-
B25	0.5	B25-0.5	10/20/2018	T183212	-	**8**	-	-	-	-	-	-	**130**	-	-	-	-	-	-	-	-
	1.5	B25-1.5	10/20/2018	T183212	-	**17**	-	-	-	-	-	-	**6.8**	-	-	-	-	-	-	-	-
	2.5	B25-2.5	10/20/2018	T183212	-	**17**	-	-	-	-	-	-	**6.2**	-	-	-	-	-	-	-	-
B25A	0.5	B25A-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**24.7**	-	-	-	-	-	-	-	-
		B25A-0.5-DUP	6/13/2019	416293	-	-	-	-	-	-	-	-	**17.9**	-	-	-	-	-	-	-	-
B25B	0.5	B25B-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**80.2**	-	-	-	-	-	-	-	-
B25BB	0.5	B25-BB-0.5	8/16/2019	418425	-	-	-	-	-	-	-	-	**54.4**	-	-	-	-	-	-	-	-
B25C	0.5	B25C-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**194**	-	-	-	-	-	-	-	-
B25D	0.5	B25D-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**186**	-	-	-	-	-	-	-	-
B25DD	0.5	B25-DD-0.5	8/16/2019	418425	-	-	-	-	-	-	-	-	**37.6**	-	-	-	-	-	-	-	-
B26	0.5	B26-0.5	10/20/2018	T183211	-	**21**	-	-	-	-	-	-	**9.6**	-	-	-	-	-	-	-	-
		B26-0.5-DUP	10/20/2018	T183211	-	**19**	-	-	-	-	-	-	**8.4**	-	-	-	-	-	-	-	-
	1.5	B26-1.5	10/20/2018	T183211	-	**8.6**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
		B26-1.5-DUP	10/20/2018	T183211	-	**6.1**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
	2.5	B26-2.5	10/20/2018	T183211	-	**20**	-	-	-	-	-	-	**9.9**	-	-	-	-	-	-	-	-
		B26-2.5-DUP	10/20/2018	T183211	-	**16**	-	-	-	-	-	-	**7.8**	-	-	-	-	-	-	-	-
B27	0.5	B27-0.5	9/10/2018	T182803	-	**15**	-	-	-	-	-	-	**55**	-	-	-	-	-	-	-	-
	1.5	B27-1.5	9/10/2018	T182803	-	**18**	-	-	-	-	-	-	**9**	-	-	-	-	-	-	-	-
	2.5	B27-2.5	9/10/2018	T182803	-	**20**	-	-	-	-	-	-	**7.9**	-	-	-	-	-	-	-	-
B28	0.5	B28-0.5	10/20/2018	T183211	-	**15**	-	-	-	-	-	-	**9.9**	-	-	-	-	-	-	-	-
	1.5	B28-1.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**6.6**	-	-	-	-	-	-	-	-
	2.5	B28-2.5	10/20/2018	T183212	-	**17**	-	-	-	-	-	-	**7.1**	-	-	-	-	-	-	-	-
B29	0.5	B29-0.5	10/20/2018	T183212	-	**11**	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-
	1.5	B29-1.5	10/20/2018	T183212	-	**12**	-	-	-	-	-	-	**5.7**	-	-	-	-	-	-	-	-
	2.5	B29-2.5	10/20/2018	T183212	-	**19**	-	-	-	-	-	-	**7.5**	-	-	-	-	-	-	-	-

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Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B30	0.5	B30-0.5	10/20/2018	T183212	-	**16**	-	-	-	-	-	-	**13**	-	-	-	-	-	-	-	-
	1.5	B30-1.5	10/20/2018	T183212	-	**13**	-	-	-	-	-	-	**6.9**	-	-	-	-	-	-	-	-
	2.5	B30-2.5	10/20/2018	T183212	-	**17**	-	-	-	-	-	-	**6.9**	-	-	-	-	-	-	-	-
B31	0.5	B31-0.5	10/20/2018	T183212	-	**15**	-	-	-	-	-	-	**31**	-	-	-	-	-	-	-	-
		B31-0.5-dup	10/20/2018	T183212	-	**13**	-	-	-	-	-	-	**41**	-	-	-	-	-	-	-	-
	1.5	B31-1.5	10/20/2018	T183212	-	**14**	-	-	-	-	-	-	**7.4**	-	-	-	-	-	-	-	-
		B31-1.5-dup	10/20/2018	T183212	-	**14**	-	-	-	-	-	-	**8.5**	-	-	-	-	-	-	-	-
	2.5	B31-2.5	10/20/2018	T183212	-	**18**	-	-	-	-	-	-	**7.3**	-	-	-	-	-	-	-	-
		B31-2.5-dup	10/20/2018	T183212	-	**13**	-	-	-	-	-	-	**5.7**	-	-	-	-	-	-	-	-
B32	0.5	B32-0.5	10/20/2018	T183211	-	**20**	-	-	-	-	-	-	**9.7**	-	-	-	-	-	-	-	-
	1.5	B32-1.5	10/20/2018	T183211	-	**18**	-	-	-	-	-	-	**8.9**	-	-	-	-	-	-	-	-
	2.5	B32-2.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**17**	-	-	-	-	-	-	-	-
B41	0.5	B41-0.5	10/20/2018	T183211	-	**7**	-	-	-	-	-	-	**8.8**	-	-	-	-	-	-	-	-
	1.5	B41-1.5	10/20/2018	T183211	-	**18**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
	2.5	B41-2.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**7.3**	-	-	-	-	-	-	-	-
B42	0.5	B42-0.5	10/20/2018	T183211	-	**13**	-	-	-	-	-	-	**14**	-	-	-	-	-	-	-	-
B43	0.5	B43-0.5	10/20/2018	T183211	-	**10**	-	-	-	-	-	-	**21**	-	-	-	-	-	-	-	-
	1.5	B43-1.5	10/20/2018	T183211	-	**15**	-	-	-	-	-	-	**7.1**	-	-	-	-	-	-	-	-
	2.5	B43-2.5	10/20/2018	T183211	-	**18**	-	-	-	-	-	-	**7.3**	-	-	-	-	-	-	-	-
B44	0.5	B44-0.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**22**	-	-	-	-	-	-	-	-
	1.5	B44-1.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
	2.5	B44-2.5	10/20/2018	T183211	-	**21**	-	-	-	-	-	-	**8.6**	-	-	-	-	-	-	-	-
B45	0.5	B45-0.5	10/20/2018	T183211	<3	<5	**60**	<1	<2	**8.1**	**6.1**	**14**	**17**	<0.1	<5	**5.6**	<5	<2	<2	**29**	**45**
	1.5	B45-1.5	10/20/2018	T183211	<3	<5	**130**	<1	<2	**25**	**9.7**	**26**	<3	<0.1	<5	**17**	<5	<2	<2	**65**	**59**
	2.5	B45-2.5	10/20/2018	T183211	<2.7	<4.5	**110**	<0.91	<1.8	**23**	**8.8**	**24**	<2.7	<0.1	<4.5	**19**	<4.5	<1.8	<1.8	**61**	**53**
B46	0.5	B46-0.5	10/20/2018	T183212	<3	<5	**91**	<1	<2	**18**	**7.9**	**21**	**21**	<0.1	<5	**14**	<5	<2	<2	**43**	**210**
		B46-0.5dup	10/20/2018	T183212	<2.7	**10**	**150**	<0.91	<1.8	**25**	**12**	**31**	<2.7	<0.1	<4.5	**19**	<4.5	<1.8	<1.8	**63**	**180**
	1.5	B46-1.5	10/20/2018	T183212	<3	<5	**190**	<1	<2	**40**	**16**	**67**	<3	<0.1	<5	**19**	<5	<2	<2	**98**	**95**
		B46-1.5dup	10/20/2018	T183212	<3	<5	**130**	<1	<2	**28**	**13**	**29**	<3	<0.1	<5	**18**	<5	<2	<2	**70**	**62**
	2.5	B46-2.5	10/20/2018	T183212	<3	<5	**160**	<1	<2	**35**	**16**	**37**	**30**	<0.1	<5	**21**	<5	<2	<2	**93**	**79**
		B46-2.5dup	10/20/2018	T183212	<3	<5	**180**	<1	<2	**35**	**14**	**37**	<3	<0.1	<5	**27**	<5	<2	<2	**90**	**80**
B47	0.5	B47-0.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**17**	-	-	-	-	-	-	-	-
	1.5	B47-1.5	10/20/2018	T183211	-	**13**	-	-	-	-	-	-	**9.1**	-	-	-	-	-	-	-	-
	2.5	B47-2.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**8.3**	-	-	-	-	-	-	-	-

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					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B48	0.5	B48-0.5	9/19/2018	T182898	-	**16**	-	-	-	-	-	-	**20**	-	-	-	-	-	-	-	-
	1.5	B48-1.5	9/19/2018	T182898	-	**20**	-	-	-	-	-	-	**20**	-	-	-	-	-	-	-	-
	2.5	B48-2.5	9/19/2018	T182898	-	**17**	-	-	-	-	-	-	**6.7**	-	-	-	-	-	-	-	-
B49	0.5	B49-0.5	10/20/2018	T183211	-	**16**	-	-	-	-	-	-	**7.1**	-	-	-	-	-	-	-	-
	1.5	B49-1.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**6.4**	-	-	-	-	-	-	-	-
	2.5	B49-2.5	10/20/2018	T183211	-	**20**	-	-	-	-	-	-	**8.4**	-	-	-	-	-	-	-	-
B50	0.5	B50-0.5	11/19/2018	T183454	-	**14**	-	-	-	-	-	-	**52**	-	-	-	-	-	-	-	-
	1.5	B50-1.5	11/19/2018	T183454	-	**17**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	2.5	B50-2.5	11/19/2018	T183454	-	**19**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
B51	0.5	B51-0.5	10/20/2018	T183211	-	**18**	-	-	-	-	-	-	**7.3**	-	-	-	-	-	-	-	-
		B51-0.5-DUP	10/20/2018	T183211	-	**22**	-	-	-	-	-	-	**15**	-	-	-	-	-	-	-	-
	1.5	B51-1.5	10/20/2018	T183211	-	**18**	-	-	-	-	-	-	**15**	-	-	-	-	-	-	-	-
		B51-1.5-DUP	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**9.7**	-	-	-	-	-	-	-	-
B52	0.5	B52-0.5	10/20/2018	T183212	-	**20**	-	-	-	-	-	-	**13**	-	-	-	-	-	-	-	-
	1.5	B52-1.5	10/20/2018	T183212	-	**12**	-	-	-	-	-	-	**17**	-	-	-	-	-	-	-	-
	2.5	B52-2.5	10/20/2018	T183212	-	**12**	-	-	-	-	-	-	**5.8**	-	-	-	-	-	-	-	-
B53	0.5	B53-0.5	9/10/2018	T182803	-	**18**	-	-	-	-	-	-	**27**	-	-	-	-	-	-	-	-
	1.5	B53-1.5	9/10/2018	T182803	-	**17**	-	-	-	-	-	-	**7.8**	-	-	-	-	-	-	-	-
	2.5	B53-2.5	9/10/2018	T182803	-	**21**	-	-	-	-	-	-	**11**	-	-	-	-	-	-	-	-
	5	B53-5.0	9/10/2018	T182803	<3	**24**	**160**	<1	<2	**42**	**23**	**40**	**13**	<0.1	<5	**38**	<5	<2	<2	**79**	**89**
	10	B53-10.0	9/10/2018	T182803	<3	**36**	**210**	<1	<2	**67**	**31**	**53**	**16**	<0.1	<5	**51**	<5	<2	<2	**120**	**130**
	15	B53-15.0	9/10/2018	T182803	<3	**23**	**170**	<1	<2	**45**	**23**	**35**	**12**	<0.1	<5	**34**	<5	<2	<2	**82**	**89**
B53A	5	B53A - 5.0	6/12/2019	416244	-	-	-	-	-	-	**13**	-	-	-	-	-	-	-	-	-	-
	10	B53A - 10.0	6/12/2019	416244	-	**17.3**	-	-	-	-	**16**	-	-	-	-	-	-	-	-	-	-
	15	B53A - 15.0	6/12/2019	416244	-	-	-	-	-	-	**12.8**	-	-	-	-	-	-	-	-	-	-
B53B	5	B53B - 5.0	6/12/2019	416244	-	-	-	-	-	-	**11.7**	-	-	-	-	-	-	-	-	-	-
	10	B53B - 10.0	6/12/2019	416244	-	**15.4**	-	-	-	-	**20.6**	-	-	-	-	-	-	-	-	-	-
	15	B53B - 15.0	6/12/2019	416244	-	-	-	-	-	-	**12.8**	-	-	-	-	-	-	-	-	-	-
B53C	5	B53C - 5.0	6/12/2019	416244	-	-	-	-	-	-	**12.2**	-	-	-	-	-	-	-	-	-	-
	10	B53C - 10.0	6/12/2019	416244	-	**17.9**	-	-	-	-	**17.6**	-	-	-	-	-	-	-	-	-	-
	15	B53C - 15.0	6/12/2019	416244	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-	-	-

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					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B53D	5	B53D - 5.0	6/12/2019	416244	-	-	-	-	-	-	**12.9**	-	-	-	-	-	-	-	-	-	-
	10	B53D - 10.0	6/12/2019	416244	-	**15.4**	-	-	-	-	**17.3**	-	-	-	-	-	-	-	-	-	-
	15	B53D - 15.0	6/12/2019	416244	-	-	-	-	-	-	**13.8**	-	-	-	-	-	-	-	-	-	-
B55	0.5	B55-0.5	11/19/2018	T183454	-	**8.1**	-	-	-	-	-	-	**15**	-	-	-	-	-	-	-	-
		B55-0.5-DUP	11/19/2018	T183454	-	**9.3**	-	-	-	-	-	-	**22**	-	-	-	-	-	-	-	-
	1.5	B55-1.5	11/19/2018	T183454	-	**15**	-	-	-	-	-	-	**6.8**	-	-	-	-	-	-	-	-
		B55-1.5-DUP	11/19/2018	T183454	-	**13**	-	-	-	-	-	-	**6.2**	-	-	-	-	-	-	-	-
	2.5	B55-2.5	11/19/2018	T183454	-	**17**	-	-	-	-	-	-	**6.8**	-	-	-	-	-	-	-	-
		B55-2.5-DUP	11/19/2018	T183454	-	**16**	-	-	-	-	-	-	**7.3**	-	-	-	-	-	-	-	-
	5	B55-5.0	11/19/2018	T183454	<3	**20**	**150**	<1	<2	**32**	**14**	**38**	<3	<0.1	<5	**30**	<5	<2	<2	**75**	**160**
		B55-5.0-DUP	11/19/2018	T183454	<3	<5	**110**	<1	<2	**32**	**16**	**30**	<3	<0.1	<5	**26**	<5	<2	<2	**72**	**62**
	10	SV55-10.0	11/21/2018	T183494	<3	**19**	**150**	<1	<2	**45**	**17**	**30**	<3	<0.1	<5	**34**	<5	<2	<2	**79**	**91**
	15	SV55-15.0-SO	11/21/2018	T183494	<3	**22**	**120**	<1	<2	**33**	**11**	**22**	<3	<0.1	<5	**24**	<5	<2	<2	**59**	**62**
B56	0.5	B56-0.5	11/19/2018	T183454	-	**16**	-	-	-	-	-	-	**8.3**	-	-	-	-	-	-	-	-
	1.5	B56-1.5	11/19/2018	T183454	-	**20**	-	-	-	-	-	-	**7.8**	-	-	-	-	-	-	-	-
	2.5	B56-2.5	11/19/2018	T183454	-	**16**	-	-	-	-	-	-	**6.9**	-	-	-	-	-	-	-	-
	5	B56-5.0	11/19/2018	T183454	<3	**20**	**120**	<1	<2	**36**	**16**	**35**	<3	<0.1	<5	**36**	<5	<2	<2	**81**	**78**
	10	SV56-10.0	11/21/2018	T183494	<3	**16**	**130**	<1	<2	**39**	**14**	**26**	<3	<0.1	<5	**30**	<5	<2	<2	**69**	**72**
	15	SV56-15.0-SO	11/21/2018	T183494	<3	**10**	**120**	<1	<2	**31**	**13**	**28**	<3	<0.1	<5	**28**	<5	<2	<2	**55**	**63**
B57	5	B57-5.0	9/10/2018	T182803	<3	**25**	**150**	<1	<2	**45**	**23**	**38**	**15**	<0.1	<5	**35**	<5	<2	<2	**77**	**90**
	10	B57-10.0	9/10/2018	T182803	<3	**37**	**210**	<1	<2	**69**	**30**	**60**	**21**	<0.1	<5	**55**	<5	<2	<2	**130**	**130**
	15	B57-15.0	9/10/2018	T182803	<3	**29**	**150**	<1	<2	**48**	**24**	**38**	**15**	<0.1	<5	**36**	<5	<2	<2	**88**	**83**
B57A	5	B57A - 5.0	6/12/2019	416244	-	-	-	-	-	-	**14.2**	-	-	-	-	-	-	-	-	-	-
		B57A - 5.0 - DUP	6/12/2019	416244	-	-	-	-	-	-	**15.2**	-	-	-	-	-	-	-	-	-	-
	10	B57A - 10.0	6/12/2019	416244	-	**19.1**	-	-	-	-	**18.9**	-	-	-	-	-	-	-	-	-	-
	15	B57A - 15.0	6/12/2019	416244	-	**11.8**	-	-	-	-	**12.9**	-	-	-	-	-	-	-	-	-	-
B57B	5	B57B - 5.0	6/12/2019	416244	-	-	-	-	-	-	**15.5**	-	-	-	-	-	-	-	-	-	-
	10	B57B - 10.0	6/12/2019	416244	-	**18.4**	-	-	-	-	**18.3**	-	-	-	-	-	-	-	-	-	-
	15	B57B - 15.0	6/12/2019	416244	-	**12.7**	-	-	-	-	**14**	-	-	-	-	-	-	-	-	-	-
B57C	5	B57C - 5.0	6/12/2019	416244	-	-	-	-	-	-	**12.2**	-	-	-	-	-	-	-	-	-	-
	10	B57C - 10.0	6/12/2019	416244	-	**16.7**	-	-	-	-	**15.6**	-	-	-	-	-	-	-	-	-	-
	15	B57C - 15.0	6/12/2019	416244	-	**11.1**	-	-	-	-	**14.6**	-	-	-	-	-	-	-	-	-	-

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Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B57D	5	B57D - 5.0	6/12/2019	416244	-	-	-	-	-	-	**15.5**	-	-	-	-	-	-	-	-	-	-
		B57D - 5.0 - DUP	6/12/2019	416244	-	-	-	-	-	-	**12.6**	-	-	-	-	-	-	-	-	-	-
	10	B57D - 10.0	6/12/2019	416244	-	**17.5**	-	-	-	-	**17.7**	-	-	-	-	-	-	-	-	-	-
		B57D - 10.0 - DUP	6/12/2019	416244	-	**20**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	B57D - 15.0	6/12/2019	416244	-	**155**	-	-	-	-	**13.2**	-	-	-	-	-	-	-	-	-	-
B60	0.5	B60-0.5	11/19/2018	T183454	-	**16**	-	-	-	-	-	-	**14**	-	-	-	-	-	-	-	-
	1.5	B60-1.5	11/19/2018	T183454	-	**16**	-	-	-	-	-	-	**5.1**	-	-	-	-	-	-	-	-
	2.5	B60-2.5	11/19/2018	T183454	-	**20**	-	-	-	-	-	-	**5.2**	-	-	-	-	-	-	-	-
	5	B60-5.0	11/19/2018	T183454	<3	**25**	**100**	<1	<2	**33**	**13**	**29**	<3	<0.1	<5	**19**	<5	<2	<2	**69**	**61**
	10	SV60-10.0	11/21/2018	T183494	<3	**16**	**120**	<1	<2	**42**	**13**	**28**	<3	<0.1	<5	**30**	<5	<2	<2	**67**	**67**
	15	SV60-15.0-SO	11/21/2018	T183494	<3	**12**	**120**	<1	<2	**34**	**13**	**23**	<3	<0.1	<5	**26**	<5	<2	<2	**62**	**61**
B61	0.5	B61-0.5	9/10/2018	T182803	-	**18**	-	-	-	-	-	-	**8**	-	-	-	-	-	-	-	-
	1.5	B61-1.5	9/10/2018	T182803	-	**21**	-	-	-	-	-	-	**8**	-	-	-	-	-	-	-	-
	2.5	B61-2.5	9/10/2018	T182803	-	**17**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
	5	B61-5.0	9/10/2018	T182803	<3	**21**	**140**	<1	<2	**41**	**22**	**35**	**14**	<0.1	<5	**37**	<5	<2	<2	**74**	**80**
	10	B61-10.0	9/10/2018	T182803	<3	**34**	**180**	<1	<2	**58**	**26**	**54**	**16**	<0.1	<5	**47**	<5	<2	<2	**100**	**110**
	15	B61-15.0	9/10/2018	T182803	<3	**20**	**110**	<1	<2	**36**	**20**	**29**	**11**	<0.1	<5	**28**	<5	<2	<2	**66**	**64**
B61A	10	B61A-10.0	6/13/2019	416293	-	**16.8**	-	-	-	-	**16.9**	-	-	-	-	-	-	-	-	-	-
B61B	10	B61B-10.0	6/13/2019	416293	-	**17.9**	-	-	-	-	**13.8**	-	-	-	-	-	-	-	-	-	-
		B61B-10.0-DUP	6/13/2019	416293	-	**15.4**	-	-	-	-	**11.4**	-	-	-	-	-	-	-	-	-	-
B62	0.5	B62-0.5	11/19/2018	T183454	-	**12**	-	-	-	-	-	-	**5.4**	-	-	-	-	-	-	-	-
	1.5	B62-1.5	11/19/2018	T183454	-	**16**	-	-	-	-	-	-	**7**	-	-	-	-	-	-	-	-
	2.5	B62-2.5	11/19/2018	T183454	-	**6.9**	-	-	-	-	-	-	**3.7**	-	-	-	-	-	-	-	-
	5	B62-5.0	11/19/2018	T183454	<3	**20**	**110**	<1	<2	**32**	**13**	**28**	<3	<0.1	<5	**23**	<5	<2	<2	**68**	**63**
	10	SV62-10.0	11/21/2018	T183494	<3	**20**	**140**	<1	<2	**43**	**16**	**33**	<3	<0.1	<5	**35**	<5	<2	<2	**77**	**77**
	15	SV62-15.0-SO	11/21/2018	T183494	<3	**15**	**120**	<1	<2	**34**	**14**	**24**	<3	<0.1	<5	**27**	<5	<2	<2	**66**	**63**
B63	0.5	B63-0.5	9/19/2018	T182898	-	**10**	-	-	-	-	-	-	**3.7**	-	-	-	-	-	-	-	-
	1.5	B63-1.5	9/19/2018	T182898	-	**23**	-	-	-	-	-	-	**6.5**	-	-	-	-	-	-	-	-
	2.5	B63-2.5	9/19/2018	T182898	-	**14**	-	-	-	-	-	-	**5**	-	-	-	-	-	-	-	-
	5	B63-5.0(19)	9/19/2018	T182898	<3	**18**	**73**	<1	<2	**38**	**12**	**30**	<3	<0.1	<5	**24**	<5	<2	<2	**58**	**54**
	10	B63-10.0(24)	9/19/2018	T182898	**11**	**12**	**56**	<1	<2	**35**	**10**	**22**	**6.3**	<0.1	<5	**22**	<5	<2	<2	**49**	**46**
	15	B63-15.0(29)	9/19/2018	T182898	<3	**8.3**	**41**	<1	<2	**23**	**11**	**15**	<3	<0.1	<5	**18**	<5	<2	<2	**33**	**27**

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					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B64	0.5	B64-0.5	9/19/2018	T182898	-	**17**	-	-	-	-	-	-	**21**	-	-	-	-	-	-	-	-
	1.5	B64-1.5	9/19/2018	T182898	-	**19**	-	-	-	-	-	-	**6.2**	-	-	-	-	-	-	-	-
	2.5	B64-2.5	9/19/2018	T182898	-	**3.3**	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-
	5	SV64-5.0 (17)	11/21/2018	T183494	<3	**14**	**84**	<1	<2	**39**	**8.6**	**25**	<3	<0.1	<5	**23**	<5	<2	<2	**55**	**49**
	10	SV64-10.0 (22)	11/21/2018	T183494	<3	**15**	**76**	<1	<2	**32**	**7.5**	**22**	<3	<0.1	<5	**23**	<5	<2	<2	**51**	**50**
	15	SV64-15.0 (27)	11/21/2018	T183494	<3	<5	**50**	<1	<2	**19**	**7.2**	**10**	<3	<0.1	<5	**15**	<5	<2	<2	**26**	**25**
B65	0.5	B65-0.5	9/10/2018	T182803	-	**2.6**	-	-	-	-	-	-	**4.4**	-	-	-	-	-	-	-	-
	1.5	B65-1.5	9/10/2018	T182803	-	**22**	-	-	-	-	-	-	**9.2**	-	-	-	-	-	-	-	-
	2.5	B65-2.5	9/10/2018	T182803	-	**20**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
	5	B65-5.0	9/10/2018	T182803	<3	**19**	**130**	<1	<2	**55**	**19**	**36**	**12**	<0.1	<5	**37**	<5	<2	<2	**82**	**87**
	10	B65-10.0	9/10/2018	T182803	<3	**25**	**130**	<1	<2	**44**	**22**	**35**	**12**	<0.1	<5	**33**	<5	<2	<2	**79**	**72**
	15	B65-15.0	9/10/2018	T182803	<3	**19**	**110**	<1	<2	**37**	**19**	**29**	**16**	<0.1	<5	**27**	<5	<2	<2	**61**	**62**
B66	0.5	B66-0.5	9/19/2018	T182898	-	**25**	-	-	-	-	-	-	**5.5**	-	-	-	-	-	-	-	-
	1.5	B66-1.5	9/19/2018	T182898	-	**16**	-	-	-	-	-	-	**5.6**	-	-	-	-	-	-	-	-
	2.5	B66-2.5	9/19/2018	T182898	-	**15**	-	-	-	-	-	-	**5.7**	-	-	-	-	-	-	-	-
B67	0.5	B67-0.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**20**	-	-	-	-	-	-	-	-
	1.5	B67-1.5	10/20/2018	T183211	-	**15**	-	-	-	-	-	-	**7.6**	-	-	-	-	-	-	-	-
	2.5	B67-2.5	10/20/2018	T183211	-	**2.5**	-	-	-	-	-	-	**3.3**	-	-	-	-	-	-	-	-
B68	0.5	B68-0.5	10/20/2018	T183211	-	**19**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
	1.5	B68-1.5	10/20/2018	T183211	-	**23**	-	-	-	-	-	-	**18**	-	-	-	-	-	-	-	-
	2.5	B68-2.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
B69	0.5	B69-0.5	10/20/2018	T183212	-	**16**	-	-	-	-	-	-	**13**	-	-	-	-	-	-	-	-
	1.5	B69-1.5	10/20/2018	T183212	-	**17**	-	-	-	-	-	-	**9**	-	-	-	-	-	-	-	-
	2.5	B69-2.5	10/20/2018	T183212	-	**15**	-	-	-	-	-	-	**8.6**	-	-	-	-	-	-	-	-
B70	0.5	B70-0.5	11/21/2018	T183494	-	**3.2**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
	1.5	B70-1.5	11/21/2018	T183494	-	**30**	-	-	-	-	-	-	**7.8**	-	-	-	-	-	-	-	-
B70A	0.5	B70A-0.5	6/13/2019	416293	**0.4JB1**	**3.81**	**31.7**	<0.5	**0.38J**	**8.1**	**2.92**	**7.82**	**14.6**	<0.14	**0.73JB1**	**4.87**	**1.45J**	<0.5	<3	**12.5**	**67.6**
	1.5	B70A-1.5	6/13/2019	416293	**3.2**	**16.3**	**94.5**	<0.5	**1.05**	**29.6**	**9.06**	**19**	**13.2**	<0.14	**0.16JB1**	**19.2**	<3	<0.5	<3	**51.2**	**54.4**
B70B	0.5	B70B-0.5	6/13/2019	416293	**0.72JB1**	**4.31**	**33.6**	<0.5	**0.32J**	**7.37**	**2.98**	**8.95**	**8.52**	<0.14	**0.62JB1**	**4.32**	**3.23**	<0.5	<3	**12.9**	**55.2**
	1.5	B70B-1.5	6/13/2019	416293	**1.51JB1**	**34.9**	**134**	<0.5	**2.15**	**38.7**	**13.2**	**27.5**	**14.2**	<0.14	**2.1**	**31.7**	<3	<0.5	**1.15JB1**	**69.1**	**81.3**
B70BB	1.5	B70BB-1.5	8/12/2019	418214	-	**22.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B71	0.5	B71-0.5	9/19/2018	T182898	-	**17**	-	-	-	-	-	-	**6.9**	-	-	-	-	-	-	-	-
B72	0.5	B72-0.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**8**	-	-	-	-	-	-	-	-
	1.5	B72-1.5	10/20/2018	T183211	-	**19**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
	2.5	B72-2.5	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**6.9**	-	-	-	-	-	-	-	-

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Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B73	0.5	B73-0.5	9/19/2018	T182898	-	**6.5**	-	-	-	-	-	-	**5.8**	-	-	-	-	-	-	-	-
	1.5	B73-1.5	9/19/2018	T182898	-	**17**	-	-	-	-	-	-	**6.8**	-	-	-	-	-	-	-	-
	2.5	B73-2.5	9/19/2018	T182898	-	**16**	-	-	-	-	-	-	**6.6**	-	-	-	-	-	-	-	-
B74	0.5	B74-0.5	9/19/2018	T182898	-	**11**	-	-	-	-	-	-	**9.2**	-	-	-	-	-	-	-	-
	1.5	B74-1.5	9/19/2018	T182898	-	**22**	-	-	-	-	-	-	**5.8**	-	-	-	-	-	-	-	-
	2.5	B74-2.5	9/19/2018	T182898	-	**13**	-	-	-	-	-	-	**5.8**	-	-	-	-	-	-	-	-
B79	0.5	B79-0.5	6/14/2019	416329	-	**14.2**	-	-	-	-	-	-	**9.35**	-	-	-	-	-	-	-	-
		B79-0.5-DUP	6/14/2019	416329	-	**16.3**	-	-	-	-	-	-	**8.19**	-	-	-	-	-	-	-	-
	1.5	B79-1.5	6/14/2019	416329	-	**20.6**	-	-	-	-	-	-	**24.1**	-	-	-	-	-	-	-	-
	2.5	B79-2.5	6/14/2019	416329	-	**14.2**	-	-	-	-	-	-	**6.81**	-	-	-	-	-	-	-	-
B80	0.5	B80-0.5	6/14/2019	416329	-	**4.2**	-	-	-	-	-	-	**29.9**	-	-	-	-	-	-	-	-
	1.5	B80-1.5	6/14/2019	416329	-	**15.2**	-	-	-	-	-	-	**12.9**	-	-	-	-	-	-	-	-
	2.5	B80-2.5	6/14/2019	416329	-	**13.1**	-	-	-	-	-	-	**7.46**	-	-	-	-	-	-	-	-
B81	0.5	B81-0.5	6/14/2019	416329	-	**6.05**	-	-	-	-	-	-	**14**	-	-	-	-	-	-	-	-
		B81-0.5-DUP	6/14/2019	416329	-	**4.62**	-	-	-	-	-	-	**15.4**	-	-	-	-	-	-	-	-
	1.5	B81-1.5	6/14/2019	416329	-	**11.3**	-	-	-	-	-	-	**12**	-	-	-	-	-	-	-	-
	2.5	B81-2.5	6/14/2019	416329	-	**12.7**	-	-	-	-	-	-	**7.6**	-	-	-	-	-	-	-	-
B82	0.5	B82-0.5	6/14/2019	416329	-	**2.7**	-	-	-	-	-	-	**9.01**	-	-	-	-	-	-	-	-
	1.5	B82-1.5	6/14/2019	416329	-	**11.3**	-	-	-	-	-	-	**17**	-	-	-	-	-	-	-	-
	2.5	B82-2.5	6/14/2019	416329	-	**11.9**	-	-	-	-	-	-	**8.11**	-	-	-	-	-	-	-	-
B83	0.5	B83-0.5	6/14/2019	416329	-	**6.88**	-	-	-	-	-	-	**88.6**	-	-	-	-	-	-	-	-
		B83-0.5-DUP	6/14/2019	416329	-	**11.1**	-	-	-	-	-	-	**18.5**	-	-	-	-	-	-	-	-
	1.5	B83-1.5	6/14/2019	416329	-	**14.8**	-	-	-	-	-	-	**7.29**	-	-	-	-	-	-	-	-
	2.5	B83-2.5	6/14/2019	416329	-	**23.8**	-	-	-	-	-	-	**5.23**	-	-	-	-	-	-	-	-
B83A	0.5	B83AA-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**12.6**	-	-	-	-	-	-	-	-
B83B	0.5	B83BB-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**9.2**	-	-	-	-	-	-	-	-
B83C	0.5	B83CC-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**28**	-	-	-	-	-	-	-	-
B83D	0.5	B83DD-0.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**39.2**	-	-	-	-	-	-	-	-
B84	0.5	B84-0.5	6/14/2019	416329	-	**27.1**	-	-	-	-	-	-	**47.9**	-	-	-	-	-	-	-	-
	1.5	B84-1.5	6/14/2019	416329	-	**15.6**	-	-	-	-	-	-	**8.48**	-	-	-	-	-	-	-	-
	2.5	B84-2.5	6/14/2019	416329	-	**15.9**	-	-	-	-	-	-	**8.67**	-	-	-	-	-	-	-	-

Table 2
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Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B85	0.5	B85-0.5	6/14/2019	416329	-	**5.42**	-	-	-	-	-	-	**28.8**	-	-	-	-	-	-	-	-
		B85-0.5-DUP	6/14/2019	416329	-	**6.12**	-	-	-	-	-	-	**29.9**	-	-	-	-	-	-	-	-
	1.5	B85-1.5	6/14/2019	416329	-	**12.3**	-	-	-	-	-	-	**9.4**	-	-	-	-	-	-	-	-
	2.5	B85-2.5	6/14/2019	416329	-	**14.4**	-	-	-	-	-	-	**7.6**	-	-	-	-	-	-	-	-
B86	0.5	B86-0.5	6/14/2019	416329	-	**2.75**	-	-	-	-	-	-	**11.4**	-	-	-	-	-	-	-	-
	1.5	B86-1.5	6/14/2019	416329	-	**15.1**	-	-	-	-	-	-	**17.8**	-	-	-	-	-	-	-	-
	2.5	B86-2.5	6/14/2019	416329	-	**9.88**	-	-	-	-	-	-	**7.7**	-	-	-	-	-	-	-	-
B90	0.5	B90-0.5	10/20/2018	T183212	-	**15**	-	-	-	-	-	-	**53**	-	-	-	-	-	-	-	-
	1.5	B90-1.5	10/20/2018	T183212	-	**14**	-	-	-	-	-	-	**28**	-	-	-	-	-	-	-	-
	2.5	B90-2.5	10/20/2018	T183212	-	**15**	-	-	-	-	-	-	**38**	-	-	-	-	-	-	-	-
B91	0.5	B91-0.5	10/20/2018	T183211	-	**15**	-	-	-	-	-	-	**8.2**	-	-	-	-	-	-	-	-
	1.5	B91-1.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**90**	-	-	-	-	-	-	-	-
	2.5	B91-2.5	10/20/2018	T183211	-	**9.7**	-	-	-	-	-	-	**8.7**	-	-	-	-	-	-	-	-
B91A	1.5	B91A-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**19.1**	-	-	-	-	-	-	-	-
		B91A-1.5-DUP	6/13/2019	416293	-	-	-	-	-	-	-	-	**13.7**	-	-	-	-	-	-	-	-
B91B	1.5	B91B-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**162**	-	-	-	-	-	-	-	-
B91BB	1.5	B91BB-1.5	8/12/2019	418214	-	-	-	-	-	-	-	-	**5.98**	-	-	-	-	-	-	-	-
B91C	1.5	B91C-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	**6.84**	-	-	-	-	-	-	-	-
B92	0.5	B92-0.5	10/20/2018	T183211	-	**11**	-	-	-	-	-	-	**6.2**	-	-	-	-	-	-	-	-
		B92-0.5-DUP	10/20/2018	T183211	-	**4.5**	-	-	-	-	-	-	**8.1**	-	-	-	-	-	-	-	-
	1.5	B92-1.5	10/20/2018	T183211	-	**19**	-	-	-	-	-	-	**8**	-	-	-	-	-	-	-	-
		B92-1.5-DUP	10/20/2018	T183211	-	**18**	-	-	-	-	-	-	**7.1**	-	-	-	-	-	-	-	-
	2.5	B92-2.5	10/20/2018	T183211	-	**14**	-	-	-	-	-	-	**16**	-	-	-	-	-	-	-	-
		B92-2.5-DUP	10/20/2018	T183211	-	**17**	-	-	-	-	-	-	**10**	-	-	-	-	-	-	-	-
B93	0.5	B93-0.5	10/20/2018	T183212	-	**16**	-	-	-	-	-	-	**37**	-	-	-	-	-	-	-	-
	1.5	B93-1.5	10/20/2018	T183212	-	**7.8**	-	-	-	-	-	-	**9.6**	-	-	-	-	-	-	-	-
	2.5	B93-2.5	10/20/2018	T183212	-	**11**	-	-	-	-	-	-	**14**	-	-	-	-	-	-	-	-
B94	0.5	B94-0.5	6/13/2019	416293	-	**11.9**	-	-	-	-	-	-	**7.19**	-	-	-	-	-	-	-	-
	1.5	B94-1.5	6/13/2019	416293	-	**12.1**	-	-	-	-	-	-	**6.82**	-	-	-	-	-	-	-	-
	2.5	B94-2.5	6/13/2019	416293	-	**12.9**	-	-	-	-	-	-	**6.42**	-	-	-	-	-	-	-	-
B95	0.5	B95-0.5	6/13/2019	416293	-	**12.4**	-	-	-	-	-	-	**10.3**	-	-	-	-	-	-	-	-
	1.5	B95-1.5	6/13/2019	416293	-	**11.6**	-	-	-	-	-	-	**7.09**	-	-	-	-	-	-	-	-
	2.5	B95-2.5	6/13/2019	416293	-	**11**	-	-	-	-	-	-	**6.43**	-	-	-	-	-	-	-	-
B96	0.5	B96-0.5	6/13/2019	416293	-	**2.48**	-	-	-	-	-	-	**29.6**	-	-	-	-	-	-	-	-
	1.5	B96-1.5	6/13/2019	416293	-	**10.2**	-	-	-	-	-	-	**14.4**	-	-	-	-	-	-	-	-
	2.5	B96-2.5	6/13/2019	416293	-	**12.1**	-	-	-	-	-	-	**11.5**	-	-	-	-	-	-	-	-

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					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B97	0.5	B97-0.5	6/13/2019	416293	-	1.297	-	-	-	-	-	-	5.49	-	-	-	-	-	-	-	-
	1.5	B97-1.5	6/13/2019	416293	-	6.95	-	-	-	-	-	-	5.62	-	-	-	-	-	-	-	-
	2.5	B97-2.5	6/13/2019	416293	-	12.1	-	-	-	-	-	-	6.99	-	-	-	-	-	-	-	-
B98	0.5	B98-0.5	6/14/2019	416329	1.1	12.8	120	<0.5	2.23	30.4	10.6	25.1	31.3	0.04	1.78	25.3	<3	<0.5	0.47J	55	89.7
	1.5	B98-1.5	6/14/2019	416329	1.53	12.4	117	<0.5	2.54	41.8	13.1	29.6	7.61	<0.14	1.92	33.2	<3	<0.5	1.29J	70	68.8
	2.5	B98-2.5	6/14/2019	416329	1.77	13.7	138	<0.5	2.55	38.9	11.5	28.8	9.58	<0.14	2.15	31.1	<3	<0.5	0.83J	77.8	74.2
B99	0.5	B99-0.5	6/14/2019	416329	2.34	12.2	120	<0.5	2.31	32.5	11.1	27.2	19.9	<0.14	2.25	26.5	<3	<0.5	1.52J	60	83.4
		B99-0.5-DUP	6/14/2019	416329	0.7	12	119	<0.5	2.11	31.4	10.6	23.9	28.2	<0.14	2.07	24.8	<3	<0.5	1J	56.6	82.2
	1.5	B99-1.5	6/14/2019	416329	2.24	11.8	212	<0.5	2.72	42.5	13.6	29.6	10.5	<0.14	2.13	34.8	<3	<0.5	2.27J	80.7	71.8
	2.5	B99-2.5	6/14/2019	416329	2.92	11.5	134	<0.5	2.73	46.6	12.5	31	6.7	<0.14	2.24	35.1	<3	<0.5	1.7J	92.1	71.5
B100	0.5	B100-0.5	6/14/2019	416329	2.09	11.7	98.6	<0.5	2.83	32.6	10.9	23.5	3.69	<0.14	2.24	31.6	<3	<0.5	2.03J	61.7	60
	1.5	B100-1.5	6/14/2019	416329	1.13	11.6	202	<0.5	2.7	41.9	13.4	29.1	4.76	<0.14	2.09	33.2	<3	<0.5	2.22J	83.4	67.1
	2.5	B100-2.5	6/14/2019	416329	0.54	14.1	136	<0.5	2.67	41.6	12.9	27.9	4.37	<0.14	1.96	32.9	<3	<0.5	1.09J	80.1	67.1
B101	0.5	B101-0.5	6/14/2019	416329	1.87	10.7	112	<0.5	2.36	31.3	10.7	22.4	5.17	<0.14	2.93	25.6	<3	<0.5	0.85J	57.7	64.2
		B101-0.5-DUP	6/14/2019	416329	0.55	9.96	134	<0.5	2.45	31	10.9	24	9.14	<0.14	2.22	26	<3	<0.5	2.13J	56.4	87.7
	1.5	B101-1.5	6/14/2019	416329	1.49	10.1	110	<0.5	2.24	31.3	10.5	21.7	3.42	<0.14	2.57	24.7	<3	<0.5	2.59J	57.5	60.3
	2.5	B101-2.5	6/14/2019	416329	3.53	13.5	127	<0.5	2.62	40.9	11.7	26.4	4.34	<0.14	2.28	31.4	<3	<0.5	1.36J	76.6	68.5
B102	0.5	B102-0.5	6/14/2019	416329	3.22	10.7	118	<0.5	2.95	37.1	12.3	27.8	13.7	<0.14	2.59	30.8	<3	<0.5	<3	67.1	84.2
	1.5	B102-1.5	6/14/2019	416329	0.56	11.2	173	<0.5	2.31	35	10.6	26.2	47.3	<0.14	1.6	26.6	<3	<0.5	2.02J	61.3	106
	2.5	B102-2.5	6/14/2019	416329	2.54	13.8	118	<0.5	2.52	37.9	12.1	25.8	4.75	<0.14	1.98	31.1	<3	<0.5	1.51J	65	66.4
B103	0.5	B103-0.5	6/14/2019	416329	-	12.8	-	-	-	-	-	-	24.5	-	-	-	-	-	-	-	-
		B103-0.5-DUP	6/14/2019	416329	-	5.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B103-1.5	6/14/2019	416329	-	10	-	-	-	-	-	-	19.9	-	-	-	-	-	-	-	-
	2.5	B103-2.5	6/14/2019	416329	-	8.82	-	-	-	-	-	-	21.9	-	-	-	-	-	-	-	-
B104	0.5	B104-0.5	6/14/2019	416329	-	7.4	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-
	1.5	B104-1.5	6/14/2019	416329	-	11	-	-	-	-	-	-	38.2	-	-	-	-	-	-	-	-
	2.5	B104-2.5	6/14/2019	416329	-	2.56	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-
B105	0.5	B105-0.5	6/14/2019	416329	-	4.24	-	-	-	-	-	-	7.53	-	-	-	-	-	-	-	-
		B105-0.5-DUP	6/14/2019	416329	-	6.32	-	-	-	-	-	-	13.7	-	-	-	-	-	-	-	-
	1.5	B105-1.5	6/14/2019	416329	-	12.7	-	-	-	-	-	-	18.5	-	-	-	-	-	-	-	-
	2.5	B105-2.5	6/14/2019	416329	-	10.3	-	-	-	-	-	-	7.55	-	-	-	-	-	-	-	-
B106	0.5	B106-0.5	6/14/2019	416329	-	5.45	-	-	-	-	-	-	18.2	-	-	-	-	-	-	-	-
	1.5	B106-1.5	6/14/2019	416329	-	11.6	-	-	-	-	-	-	12.6	-	-	-	-	-	-	-	-
	2.5	B106-2.5	6/14/2019	416329	-	10.8	-	-	-	-	-	-	20.2	-	-	-	-	-	-	-	-

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USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
B107	0.5	B107-0.5	6/14/2019	416329	-	**8.86**	-	-	-	-	-	-	**37.2**	-	-	-	-	-	-	-	-
	1.5	B107-1.5	6/14/2019	416329	-	**12.6**	-	-	-	-	-	-	**8.66**	-	-	-	-	-	-	-	-
	2.5	B107-2.5	6/14/2019	416329	-	**10.8**	-	-	-	-	-	-	**6.42**	-	-	-	-	-	-	-	-
B108	0.5	B108-0.5	6/14/2019	416329	-	**4.75**	-	-	-	-	-	-	**17.5**	-	-	-	-	-	-	-	-
	1.5	B108-1.5	6/14/2019	416329	-	**14.2**	-	-	-	-	-	-	**26.9**	-	-	-	-	-	-	-	-
	2.5	B108-2.5	6/14/2019	416329	-	**10.5**	-	-	-	-	-	-	**6.23**	-	-	-	-	-	-	-	-
B109	0.5	B109-0.5	6/14/2019	416329	-	**5.22**	-	-	-	-	-	-	**25.8**	-	-	-	-	-	-	-	-
	1.5	B109-1.5	6/14/2019	416329	-	**3.99**	-	-	-	-	-	-	**24.2**	-	-	-	-	-	-	-	-
	2.5	B109-2.5	6/14/2019	416329	-	**11.6**	-	-	-	-	-	-	**6.59**	-	-	-	-	-	-	-	-
AB01	1	AB01-1.0	2/18/2019	412613	-	**9.98**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB01-5.0	2/18/2019	412613	-	**12.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB01-10.0	2/18/2019	412613	-	**11.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB01-15.0	2/18/2019	412613	-	**14.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB01-20.0	2/18/2019	412613	-	**10.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB01-25.0	2/18/2019	412613	-	**14.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	AB01-30.0	2/18/2019	412613	-	**11.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB02	1	AB02-1.0	2/18/2019	412613	-	**13.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB02-5.0	2/18/2019	412613	-	**10.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB02-10.0	2/18/2019	412613	-	**14.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB02-15.0	2/18/2019	412613	-	**14.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB02-15.0-DUP	2/18/2019	412613	-	**20**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB02-20.0	2/18/2019	412613	-	**13.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB02-25.0	2/18/2019	412613	-	**9.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	AB02-29.0	2/18/2019	412613	-	**12**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB03	1	AB03-1.0	2/18/2019	412613	-	**9.05**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB03-5.0	2/18/2019	412613	-	**10.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB03-10.0	2/18/2019	412613	-	**13.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB03-10.0-DUP	2/18/2019	412613	-	**13**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB03-15.0	2/18/2019	412613	-	**12**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB03-20.0	2/18/2019	412613	-	**11.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB03-25.0	2/18/2019	412613	-	**15.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB03-25.0-DUP	2/18/2019	412613	-	**10.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	AB03-30.0	2/18/2019	412613	-	**6.12**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Summary of Soil Analytical Results for Metals
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
AB04	1	AB04-1.0	2/18/2019	412613	-	**12.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB04-5.0	2/18/2019	412613	-	**11.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB04-5.0-DUP	2/18/2019	412613	-	**11.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB04-10.0	2/18/2019	412613	-	**15**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB04-15.0	2/18/2019	412613	-	**19**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB04-20.0	2/18/2019	412613	-	**12.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB04-25.0	2/18/2019	412613	-	**13.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	AB04-30.0	2/18/2019	412613	-	**12.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB05	1	AB05-1.0	2/18/2019	412613	-	**9.41**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB05-1.0-DUP	2/18/2019	412613	-	**11.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB05-5.0	2/18/2019	412613	-	**12.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB05-10.0	2/18/2019	412613	-	**10.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB05-15.0	2/18/2019	412613	-	**17.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB05-20.0	2/18/2019	412613	-	**11.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB05-25.0	2/18/2019	412613	-	**9.67**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29.5	AB05-29.5	2/18/2019	412613	-	**5.11**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB06	1	AB06-1.0	2/18/2019	412613	-	**12.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB06-5.0	2/18/2019	412613	-	**11.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB06-10.0	2/18/2019	412613	-	**17.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB06-15.0	2/18/2019	412613	-	**11**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB06-20.0	2/18/2019	412613	-	**12.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB06-25.0	2/18/2019	412613	-	**12.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	AB06-30.0	2/18/2019	412613	-	**2.67**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB07	1	AB07-1.0	2/18/2019	412613	-	**9.68**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB07-5.0	2/18/2019	412613	-	**10.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB07-10.0	2/18/2019	412613	-	**16.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB07-15.0	2/18/2019	412613	-	**15.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB07-20.0	2/18/2019	412613	-	**15.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB07-20.0-DUP	2/18/2019	412613	-	**10.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB07-25.0	2/18/2019	412613	-	**9.54**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	AB07-30.0	2/18/2019	412613	-	**2.74**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB08	1	AB08-1.0	2/18/2019	412613	-	**4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB08-5.0	2/18/2019	412613	-	**9.75**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB08-10.0	2/18/2019	412613	-	**10.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB08-15.0	2/18/2019	412613	-	**12.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB08.20.0	2/18/2019	412613	-	**12**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB08-25.0	2/18/2019	412613	-	**11.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29.5	AB08-29.5	2/18/2019	412613	-	**18.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Summary of Soil Analytical Results for Metals
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Alexander Hamilton High School, Los Angeles, California

					Metals																
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								16					80	1		820					
Site Specific Background						28															
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					31		15000	160	0|71	0	23	3100	400	11	390	1500	390	390	0.78	390	23000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**																	
AB09	1	AB09-1.0	2/18/2019	412613	-	**10.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5	AB09-5.0	2/18/2019	412613	-	**13.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	AB09-10.0	2/18/2019	412613	-	**17.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AB09-10.0-DUP	2/18/2019	412613	-	**15.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	AB09-15.0	2/18/2019	412613	-	**12**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	AB09-20.0	2/18/2019	412613	-	**11.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	AB09-25.0	2/18/2019	412613	-	**11.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes
mg/kg = milligrams per kilogram
- = not analyzed
< = not reported above analytical reporting limit shown
J - estimated value
B1 =Analyte was present in a sample and the associated method blank greater than MDL but less than the RDL
ft bgs = feet below ground surface
HHRA- Human Health Risk Assessment
DTSC - Department of Toxic Substance Control
USEPA- Usited State Environmental Protection Agency

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B03	0.5	B03-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B03-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B03-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B05	0.5	B05-0.5	8/31/2018	T182726	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B05-1.5	8/31/2018	T182726	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B05-2.5	8/31/2018	T182726	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B06	0.5	B06-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B06-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B06-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B07	0.5	B07-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B07-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B07-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B08	0.5	B08-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B08-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B08-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B09	0.5	B09-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B09-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B09-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B10	0.5	B10-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B10-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B10-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B11	0.5	B11-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.04**
	1.5	B11-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	**0.14**
	2.5	B11-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	**0.16**
B12	0.5	B12-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<50	<50	-	<0.0033	<0.0047	<0.0071	-	<0.0067	<0.0035	<0.015
	1.5	B12-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B12-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B13	0.5	B13-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<50	<50	-	<0.0033	<0.0047	<0.0071	-	<0.0067	<0.0035	<0.015
		B13-0.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B13-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B13-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B03	0.5	B03-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B03-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B03-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B05	0.5	B05-0.5	8/31/2018	T182726	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B05-1.5	8/31/2018	T182726	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B05-2.5	8/31/2018	T182726	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B06	0.5	B06-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B06-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B06-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B07	0.5	B07-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B07-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B07-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B08	0.5	B08-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B08-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B08-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B09	0.5	B09-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B09-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B09-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B10	0.5	B10-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B10-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B10-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B11	0.5	B11-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B11-1.5	10/20/2018	T183212	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
	2.5	B11-2.5	10/20/2018	T183212	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
B12	0.5	B12-0.5	10/20/2018	T183212	<0.025	<0.0047	<0.005	<0.0056	<0.0047	<0.0043	<0.007	<0.0045	<0.0042	<0.0051	<0.0046	<0.0045	<0.058
	1.5	B12-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B12-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B13	0.5	B13-0.5	10/20/2018	T183211	<0.025	<0.0047	<0.005	<0.0056	<0.0047	<0.0043	<0.007	<0.0045	<0.0042	<0.0051	<0.0046	<0.0045	<0.058
		B13-0.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B13-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B13-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058

Table 3
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Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B14	0.5	B14-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B14-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B14-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B15	0.5	B15-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<50	<50	-	<0.0033	<0.0047	<0.0071	-	<0.0067	<0.0035	<0.015
	1.5	B15-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B15-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B16	0.5	B16-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B16-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B16-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B17	0.5	B17-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B17-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B17-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B18	0.5	B18-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B18-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B18-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B19	0.5	B19-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	**6.9**	**6.1**	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B19-0.5-dup	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	**8.7**	**8.9**	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B19-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B19-1.5-dup	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B19-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B19-2.5dup	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B20	0.5	B20-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<25	-	<25	<0.0028	<0.0033	<0.0069	-	<0.0032	<0.006	<0.0039
	1.5	B20-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	2.5	B20-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B21	0.5	B21-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<50	-	<50	<0.0056	<0.0066	<0.014	-	<0.0064	<0.012	<0.0078
	1.5	B21-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<25	-	<25	<0.0028	<0.0033	<0.0069	-	<0.0032	<0.006	<0.0039
	2.5	B21-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B25	0.5	B25-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	<0.0075
	1.5	B25-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B25-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015

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Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B14	0.5	B14-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B14-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B14-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B15	0.5	B15-0.5	10/20/2018	T183211	<0.025	<0.0047	<0.005	<0.0056	<0.0047	<0.0043	<0.007	<0.0045	<0.0042	<0.0051	<0.0046	<0.0045	<0.058
	1.5	B15-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B15-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B16	0.5	B16-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B16-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B16-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B17	0.5	B17-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B17-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B17-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B18	0.5	B18-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B18-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B18-2.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B19	0.5	B19-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B19-0.5-dup	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B19-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B19-1.5-dup	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B19-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B19-2.5dup	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B20	0.5	B20-0.5	11/19/2018	T183454	<0.004	<0.0054	<0.004	<0.0053	<0.0031	<0.0055	<0.0086	<0.0063	<0.0048	<0.003	<0.0049	<0.002	<0.029
	1.5	B20-1.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	2.5	B20-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B21	0.5	B21-0.5	11/19/2018	T183454	<0.008	<0.011	<0.0081	<0.011	<0.0061	<0.011	<0.017	<0.013	<0.0096	<0.0059	<0.0098	<0.004	<0.058
	1.5	B21-1.5	11/19/2018	T183454	<0.004	<0.0054	<0.004	<0.0053	<0.0031	<0.0055	<0.0086	<0.0063	<0.0048	<0.003	<0.0049	<0.002	<0.029
	2.5	B21-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B25	0.5	B25-0.5	10/20/2018	T183212	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
	1.5	B25-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B25-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B26	0.5	B26-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<50	<50	-	<0.0033	<0.0047	<0.0071	-	<0.0067	<0.0035	<0.015
		B26-0.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B26-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B26-1.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B26-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B26-2.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B27	0.5	B27-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B27-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B27-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B28	0.5	B28-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B28-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B28-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B29	0.5	B29-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B29-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B29-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B30	0.5	B30-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B30-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B30-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B31	0.5	B31-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	<0.0075
		B31-0.5-dup	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	<0.0075
	1.5	B31-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B31-1.5-dup	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B31-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B31-2.5-dup	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B32	0.5	B32-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B32-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B32-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B41	0.5	B41-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B41-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B41-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	**0.008**	**0.014**
B42	0.5	B42-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<50	<50	-	<0.0033	<0.0047	<0.0071	-	<0.0067	<0.0035	<0.015
B43	0.5	B43-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	<0.0075
	1.5	B43-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B43-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B26	0.5	B26-0.5	10/20/2018	T183211	<0.025	<0.0047	<0.005	<0.0056	<0.0047	<0.0043	<0.007	<0.0045	<0.0042	<0.0051	<0.0046	<0.0045	<0.058
		B26-0.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B26-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B26-1.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B26-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B26-2.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B27	0.5	B27-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B27-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B27-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B28	0.5	B28-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B28-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B28-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B29	0.5	B29-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B29-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B29-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B30	0.5	B30-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B30-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B30-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B31	0.5	B31-0.5	10/20/2018	T183212	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
		B31-0.5-dup	10/20/2018	T183212	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
	1.5	B31-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B31-1.5-dup	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B31-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B31-2.5-dup	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B32	0.5	B32-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B32-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B32-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B41	0.5	B41-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B41-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B41-2.5	10/20/2018	T183211	**0.024**	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B42	0.5	B42-0.5	10/20/2018	T183211	<0.025	<0.0047	<0.005	<0.0056	<0.0047	<0.0043	<0.007	<0.0045	<0.0042	<0.0051	<0.0046	<0.0045	<0.058
B43	0.5	B43-0.5	10/20/2018	T183211	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
	1.5	B43-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B43-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B44	0.5	B44-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B44-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B44-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B47	0.5	B47-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B47-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B47-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B48	0.5	B48-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B48-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B48-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B49	0.5	B49-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B49-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B49-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B50	0.5	B50-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<25	-	<25	<0.0028	<0.0033	<0.0069	-	<0.0032	<0.006	<0.0039
	1.5	B50-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	2.5	B50-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B51	0.5	B51-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B51-0.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B51-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B51-1.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B52	0.5	B52-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B52-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B52-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B53	0.5	B53-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B53-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B53-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015

Table 3
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Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B44	0.5	B44-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B44-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B44-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B47	0.5	B47-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B47-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B47-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B48	0.5	B48-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B48-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B48-2.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B49	0.5	B49-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B49-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B49-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B50	0.5	B50-0.5	11/19/2018	T183454	<0.004	<0.0054	<0.004	<0.0053	<0.0031	<0.0055	<0.0086	<0.0063	<0.0048	<0.003	<0.0049	<0.002	<0.029
	1.5	B50-1.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	2.5	B50-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B51	0.5	B51-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B51-0.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B51-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B51-1.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B52	0.5	B52-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B52-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B52-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B53	0.5	B53-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B53-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B53-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058

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					PCBs									8081 Pesticides									
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HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B55	0.5	B55-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
		B55-0.5-DUP	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	1.5	B55-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
		B55-1.5-DUP	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	2.5	B55-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
		B55-2.5-DUP	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B56	0.5	B56-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	1.5	B56-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	2.5	B56-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B60	0.5	B60-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<50	-	<50	<0.0056	<0.0066	<0.014	-	<0.0064	<0.012	<0.0078
	1.5	B60-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	2.5	B60-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B61	0.5	B61-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B61-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B61-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B62	0.5	B62-0.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<50	-	<50	<0.0056	<0.0066	<0.014	-	<0.0064	<0.012	<0.0078
	1.5	B62-1.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
	2.5	B62-2.5	11/19/2018	T183454	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B63	0.5	B63-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B63-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B63-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B64	0.5	B64-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B64-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B64-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B65	0.5	B65-0.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B65-1.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B65-2.5	9/10/2018	T182803	-	-	-	-	-	-	-	-	-	-	-	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B66	0.5	B66-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B66-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B66-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B67	0.5	B67-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B67-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B67-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B55	0.5	B55-0.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
		B55-0.5-DUP	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	1.5	B55-1.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
		B55-1.5-DUP	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	2.5	B55-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
		B55-2.5-DUP	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B56	0.5	B56-0.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	1.5	B56-1.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	2.5	B56-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B60	0.5	B60-0.5	11/19/2018	T183454	<0.008	<0.011	<0.0081	<0.011	<0.0061	<0.011	<0.017	<0.013	<0.0096	<0.0059	<0.0098	<0.004	<0.058
	1.5	B60-1.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	2.5	B60-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B61	0.5	B61-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B61-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B61-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B62	0.5	B62-0.5	11/19/2018	T183454	<0.008	<0.011	<0.0081	<0.011	<0.0061	<0.011	<0.017	<0.013	<0.0096	<0.0059	<0.0098	<0.004	<0.058
	1.5	B62-1.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	2.5	B62-2.5	11/19/2018	T183454	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B63	0.5	B63-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B63-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B63-2.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B64	0.5	B64-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B64-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B64-2.5	9/19/2018	T182898	**0.0066**	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B65	0.5	B65-0.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B65-1.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B65-2.5	9/10/2018	T182803	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B66	0.5	B66-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B66-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B66-2.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B67	0.5	B67-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B67-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B67-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B68	0.5	B68-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B68-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B68-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B69	0.5	B69-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.013**
	1.5	B69-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B69-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B70	0.5	B70-0.5	11/21/2018	T183494	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	**0.014**
	1.5	B70-1.5	11/21/2018	T183494	-	-	-	-	-	-	-	-	-	<5	-	<5	<0.00056	<0.00066	<0.0014	-	<0.00064	<0.0012	<0.00078
B70A	0.5	B70A-0.5	6/13/2019	416293	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.019**
	1.5	B70A-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B70B	0.5	B70B-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	**0.0036J**	**0.019**
	1.5	B70B-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
B71	0.5	B71-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B72	0.5	B72-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B72-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B72-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B73	0.5	B73-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B73-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B73-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B74	0.5	B74-0.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	1.5	B74-1.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B74-2.5	9/19/2018	T182898	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B79	0.5	B79-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
		B79-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B79-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B79-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B80	0.5	B80-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B80-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B80-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B81	0.5	B81-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
		B81-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B81-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B81-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B68	0.5	B68-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B68-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B68-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B69	0.5	B69-0.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B69-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B69-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B70	0.5	B70-0.5	11/21/2018	T183494	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
	1.5	B70-1.5	11/21/2018	T183494	<0.0008	<0.0011	<0.00081	<0.0011	<0.00061	<0.0011	<0.0017	<0.0013	<0.00096	<0.00059	<0.00098	<0.0004	<0.0058
B70A	0.5	B70A-0.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B70A-1.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B70B	0.5	B70B-0.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B70B-1.5	6/13/2019	416293	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.2
B71	0.5	B71-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B72	0.5	B72-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B72-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B72-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B73	0.5	B73-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B73-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B73-2.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B74	0.5	B74-0.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B74-1.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B74-2.5	9/19/2018	T182898	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B79	0.5	B79-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B79-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B79-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B79-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B80	0.5	B80-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B80-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B80-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B81	0.5	B81-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B81-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B81-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B81-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B82	0.5	B82-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B82-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B82-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B83	0.5	B83-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.0043**
		B83-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B83-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B83-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B84	0.5	B84-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B84-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B84-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B85	0.5	B85-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
		B85-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B85-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B85-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B86	0.5	B86-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B86-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B86-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B90	0.5	B90-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<50	<50	-	<0.0033	<0.0047	<0.0071	-	<0.0067	<0.0035	**0.29**
	1.5	B90-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.052**
	2.5	B90-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	**0.007**	**0.08**
B91	0.5	B91-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.066**
	1.5	B91-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.0052**
	2.5	B91-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B92	0.5	B92-0.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.017**
		B92-0.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.0067**
	1.5	B92-1.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	<0.0075
		B92-1.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
	2.5	B92-2.5	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
		B92-2.5-DUP	10/20/2018	T183211	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B93	0.5	B93-0.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<25	<25	-	<0.0016	<0.0024	<0.0035	-	<0.0033	<0.0018	**0.12**
	1.5	B93-1.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	**0.0058**
	2.5	B93-2.5	10/20/2018	T183212	-	-	-	-	-	-	-	-	-	<5	<5	-	<0.00033	<0.00047	<0.00071	-	<0.00067	<0.00035	<0.0015
B94	0.5	B94-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B94-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B94-2.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B82	0.5	B82-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B82-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B82-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B83	0.5	B83-0.5	6/14/2019	416329	**0.0086**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0064**	<0.005	<0.005	<0.01	<0.1
		B83-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B83-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B83-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B84	0.5	B84-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B84-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B84-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B85	0.5	B85-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B85-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B85-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B85-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B86	0.5	B86-0.5	6/14/2019	416329	**0.0023**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B86-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B86-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B90	0.5	B90-0.5	10/20/2018	T183212	<0.025	<0.0047	<0.005	<0.0056	<0.0047	<0.0043	<0.007	<0.0045	<0.0042	<0.0051	<0.0046	<0.0045	<0.058
	1.5	B90-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B90-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B91	0.5	B91-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B91-1.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B91-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B92	0.5	B92-0.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B92-0.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	1.5	B92-1.5	10/20/2018	T183211	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
		B92-1.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B92-2.5	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
		B92-2.5-DUP	10/20/2018	T183211	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B93	0.5	B93-0.5	10/20/2018	T183212	<0.012	<0.0024	<0.0025	<0.0028	<0.0023	<0.0021	<0.0035	<0.0022	<0.0021	<0.0025	<0.0023	<0.0023	<0.029
	1.5	B93-1.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
	2.5	B93-2.5	10/20/2018	T183212	<0.0025	<0.00047	<0.0005	<0.00056	<0.00047	<0.00043	<0.0007	<0.00045	<0.00042	<0.00051	<0.00046	<0.00045	<0.0058
B94	0.5	B94-0.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B94-1.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B94-2.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides								
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B95	0.5	B95-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B95-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B95-2.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B96	0.5	B96-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B96-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B96-2.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B97	0.5	B97-0.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B97-1.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B97-2.5	6/13/2019	416293	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B98	0.5	B98-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B98-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B98-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B99	0.5	B99-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.0022**
		B99-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	**0.094**	<0.005	**0.0041**	**0.027**
	1.5	B99-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	**0.064**	<0.005	<0.005	<0.005
	2.5	B99-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B100	0.5	B100-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B100-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B100-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B101	0.5	B101-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
		B101-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B101-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B101-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B102	0.5	B102-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	**0.14**	<0.005	**0.011**	**0.017**
	1.5	B102-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	**0.053**	<0.005	<0.005	**0.017**
	2.5	B102-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B103	0.5	B103-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.003**
		B103-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B103-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.0032**
	2.5	B103-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.0024**
B104	0.5	B104-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B104-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B104-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B95	0.5	B95-0.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B95-1.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B95-2.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B96	0.5	B96-0.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B96-1.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B96-2.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B97	0.5	B97-0.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B97-1.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B97-2.5	6/13/2019	416293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B98	0.5	B98-0.5	6/14/2019	416329	**0.0074**	**0.0079**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B98-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B98-2.5	6/14/2019	416329	**0.0048**	**0.0062**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B99	0.5	B99-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B99-0.5-DUP	6/14/2019	416329	**0.051**	**0.0099**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B99-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B99-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B100	0.5	B100-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B100-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B100-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B101	0.5	B101-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B101-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B101-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B101-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B102	0.5	B102-0.5	6/14/2019	416329	**0.25**	**0.028**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0039**	<0.01	<0.1
	1.5	B102-1.5	6/14/2019	416329	**0.0082**	**0.011**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B102-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B103	0.5	B103-0.5	6/14/2019	416329	**0.0036**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B103-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B103-1.5	6/14/2019	416329	**0.0023**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B103-2.5	6/14/2019	416329	**0.0021**	**0.0028**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B104	0.5	B104-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B104-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B104-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1

Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					PCBs									8081 Pesticides									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1268	Aroclor 1262	Chlordane (cis) (alpha)	Chlordane (trans) (gamma)	gamma-Chlordane	a-BHC	Aldrin	b-BHC	chlordane	d-BHC	4,4'-DDD	4,4'-DDE
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					4	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3			1.9	2
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					4.1	0.2	0.17	0.23	0.23	0.24	0.24						0.086	0.039	0.3	1.7		1.9	2
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B105	0.5	B105-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
		B105-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B105-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B105-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B106	0.5	B106-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B106-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B106-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	**0.0053**
B107	0.5	B107-0.5	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
		B107-0.5-DUP	6/14/2019	416329	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-
	1.5	B107-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B107-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B108	0.5	B108-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B108-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	**0.19**	<0.005	<0.005	**0.0025**
	2.5	B108-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
B109	0.5	B109-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	1.5	B109-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005
	2.5	B109-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005

Notes
mg/kg = milligrams per kilogram
- = not analyzed
< = not reported above analytical reporting limit shown
J - estimated value
ft bgs = feet below ground surface
HHRA- Human Health Risk Assessment
DTSC - Department of Toxic Substance Control
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Table 3
Summary of Soil Analytical Results for PCBs and OCPs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Pesticides												
					4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1.9	0.034				19			0.57	0.13	0.07	320	0.45
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1.9	0.034			380	19			0.57	0.13	0.07	320	0.49
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B105	0.5	B105-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B105-0.5-DUP	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B105-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B105-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B106	0.5	B106-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B106-1.5	6/14/2019	416329	**0.0045**	**0.0027**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B106-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B107	0.5	B107-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
		B107-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B107-1.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B107-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B108	0.5	B108-0.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B108-1.5	6/14/2019	416329	**0.0043**	**0.016**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0024**	<0.01	<0.1
	2.5	B108-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
B109	0.5	B109-0.5	6/14/2019	416329	**0.0046**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	1.5	B109-1.5	6/14/2019	416329	**0.0083**	**0.0053**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1
	2.5	B109-2.5	6/14/2019	416329	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.1

Notes
mg/kg = milligrams per kilogram
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J - estimated value
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Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					TPH														
					TPH as Diesel	TPH as Gasoline	TPH as Motor Oil	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2,4-trichlorobenzene	1,2,4-trimethylbenzene	1,2-dibromo-3-chloropropane
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								2	1700	0.6		3.6	83		40	0.0015	7.8		0.0043
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019								2	8100	0.6	1.1	3.6	230		63	0.0051	24	300	0.0053
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02	5	B02-5.0	9/10/2018	T182803	<10	<0.026	<10	<0.00057	<0.0005	<0.00066	<0.00064	<0.0005	<0.00051	<0.00036	<0.00037	<0.00066	<0.00039	<0.00052	<0.0018
	10	B02-10.0	9/10/2018	T182803	<10	<0.025	<10	<0.00059	<0.00052	<0.00069	<0.00066	<0.00052	<0.00052	<0.00037	<0.00038	<0.00069	<0.0004	<0.00054	<0.0018
	15	B02-15.0	9/10/2018	T182803	<10	<0.034	<10	<0.00071	<0.00062	<0.00082	<0.00079	<0.00062	<0.00063	<0.00045	<0.00046	<0.00082	<0.00048	<0.00064	<0.0022
B04	2.5	B04-2.5	9/19/2018	T182898	<10	<0.019	<10	<0.00042	<0.00037	<0.00049	<0.00047	<0.00037	<0.00037	<0.00027	<0.00027	<0.00049	<0.00028	<0.00038	<0.0013
		B04-2.5 DUP	9/19/2018	T182898	<10	<0.024	<10	<0.00045	<0.0004	<0.00053	<0.0005	<0.0004	<0.0004	<0.00029	<0.0003	<0.00053	<0.00031	<0.00041	<0.0014
	5	B04-5.0	9/19/2018	T182898	<10	<0.022	<10	<0.00069	<0.0006	<0.0008	<0.00076	<0.0006	<0.00061	<0.00043	<0.00045	<0.0008	<0.00046	<0.00062	<0.0021
B05	5	B05-5.0	8/31/2018	T182726	<10	<0.021	<10	<0.00058	<0.00051	<0.00068	<0.00065	<0.00051	<0.00052	<0.00037	<0.00038	<0.00068	<0.00039	<0.00053	<0.0018
	10	B05-10.0	8/31/2018	T182726	<10	<0.02	<10	<0.00052	<0.00046	<0.00061	<0.00058	<0.00046	<0.00046	<0.00033	<0.00034	<0.00061	<0.00035	<0.00048	<0.0016
	15	B05-15.0	8/31/2018	T182726	<10	<0.024	<10	<0.00053	<0.00047	<0.00062	<0.00059	<0.00047	<0.00047	<0.00034	<0.00035	<0.00062	<0.00036	<0.00049	<0.0017
B45	0.5	B45-0.5	10/20/2018	T183211	<10	<0.038	<10	<0.001	<0.00089	<0.0012	<0.0011	<0.00089	<0.00091	<0.00065	<0.00067	<0.0012	<0.00069	<0.00093	<0.0032
	1.5	B45-1.5	10/20/2018	T183211	<10	<0.024	<10	<0.00061	<0.00053	<0.0007	<0.00067	<0.00053	<0.00054	<0.00038	<0.00039	<0.0007	<0.00041	<0.00055	<0.0019
	2.5	B45-2.5	10/20/2018	T183211	<10	<0.039	<10	<0.00091	<0.0008	<0.0011	<0.001	<0.0008	<0.00081	<0.00058	<0.00059	<0.0011	<0.00061	<0.00083	<0.0028
B46	0.5	B46-0.5	10/20/2018	T183212	<10	<0.034	<10	<0.00093	<0.00081	<0.0011	<0.001	<0.00081	<0.00082	<0.00059	<0.0006	<0.0011	<0.00062	<0.00084	<0.0029
		B46-0.5dup	10/20/2018	T183212	<10	<0.025	**64**	<0.00078	<0.00068	<0.00091	<0.00087	<0.00068	<0.00069	<0.00049	<0.00051	<0.00091	<0.00053	<0.00071	<0.0024
	1.5	B46-1.5	10/20/2018	T183212	<10	<0.029	<10	<0.0011	<0.00098	<0.0013	<0.0013	<0.00098	<0.001	<0.00071	<0.00073	<0.0013	<0.00076	<0.001	<0.0035
		B46-1.5dup	10/20/2018	T183212	<10	<0.039	<10	<0.0011	<0.00094	<0.0013	<0.0012	<0.00095	<0.00096	<0.00068	<0.0007	<0.0013	<0.00073	<0.00098	<0.0034
	2.5	B46-2.5	10/20/2018	T183212	<10	<0.029	<10	<0.00068	<0.0006	<0.00079	<0.00076	<0.0006	<0.00061	<0.00043	<0.00045	<0.00079	<0.00046	<0.00062	<0.0021
		B46-2.5dup	10/20/2018	T183212	<10	<0.03	<10	<0.00082	<0.00072	<0.00095	<0.00091	<0.00072	<0.00073	<0.00052	<0.00053	<0.00095	<0.00055	<0.00075	<0.0026
B53	5	B53-5.0	9/10/2018	T182803	<10	<0.024	**14**	<0.00052	<0.00045	<0.0006	<0.00057	<0.00045	<0.00046	<0.00033	<0.00034	<0.0006	<0.00035	<0.00047	<0.0016
	10	B53-10.0	9/10/2018	T182803	<10	<0.025	<10	<0.00057	<0.0005	<0.00066	<0.00064	<0.0005	<0.00051	<0.00036	<0.00037	<0.00066	<0.00039	<0.00052	<0.0018
	15	B53-15.0	9/10/2018	T182803	<10	<0.025	<10	<0.00057	<0.0005	<0.00067	<0.00064	<0.0005	<0.00051	<0.00036	<0.00037	<0.00067	<0.00039	<0.00052	<0.0018
B55	5	B55-5.0	11/19/2018	T183454	<10	<0.038	**24**	<0.00082	<0.00072	<0.00096	<0.00092	<0.00072	<0.00073	<0.00052	<0.00054	<0.00096	<0.00055	<0.00075	<0.0026
		B55-5.0-DUP	11/19/2018	T183454	<10	<0.031	<10	<0.00074	<0.00065	<0.00086	<0.00082	<0.00065	<0.00066	<0.00047	<0.00048	<0.00086	<0.0005	<0.00067	<0.0023
	10	SV55-10.0	11/21/2018	T183494	<10	<0.031	<10	<0.00064	<0.00056	<0.00075	<0.00072	<0.00056	<0.00057	<0.00041	<0.00042	<0.00075	<0.00043	<0.00059	<0.002
	15	SV55-15.0-SO	11/21/2018	T183494	<10	<0.022	<10	<0.00056	<0.00049	<0.00066	<0.00063	<0.00049	<0.0005	<0.00036	<0.00037	<0.00066	<0.00038	<0.00051	<0.0018
B56	5	B56-5.0	11/19/2018	T183454	<10	<0.029	<10	<0.00078	<0.00068	<0.00091	<0.00087	<0.00068	<0.00069	<0.00049	<0.00051	<0.00091	<0.00052	<0.00071	<0.0024
	10	SV56-10.0	11/21/2018	T183494	<10	<0.028	<10	<0.00062	<0.00054	<0.00072	<0.00069	<0.00054	<0.00055	<0.00039	<0.0004	<0.00072	<0.00041	<0.00056	<0.0019
	15	SV56-15.0-SO	11/21/2018	T183494	<10	<0.028	<10	<0.00059	<0.00051	<0.00068	<0.00065	<0.00051	<0.00052	<0.00037	<0.00038	<0.00068	<0.00039	<0.00053	<0.0018
B57	5	B57-5.0	9/10/2018	T182803	<10	<0.027	<10	<0.0006	<0.00052	<0.0007	<0.00067	<0.00053	<0.00053	<0.00038	<0.00039	<0.0007	<0.0004	<0.00055	<0.0019
	10	B57-10.0	9/10/2018	T182803	<10	<0.024	<10	<0.00051	<0.00044	<0.00059	<0.00057	<0.00045	<0.00045	<0.00032	<0.00033	<0.00059	<0.00034	<0.00046	<0.0016
	15	B57-15.0	9/10/2018	T182803	<10	<0.028	<10	<0.00049	<0.00043	<0.00057	<0.00054	<0.00043	<0.00043	<0.00031	<0.00032	<0.00057	<0.00033	<0.00044	<0.0015
B60	5	B60-5.0	11/19/2018	T183454	<10	<0.022	<10	<0.00053	<0.00046	<0.00062	<0.00059	<0.00046	<0.00047	<0.00033	<0.00034	<0.00062	<0.00036	<0.00048	<0.0016
	10	SV60-10.0	11/21/2018	T183494	<10	<0.022	<10	<0.00054	<0.00048	<0.00063	<0.00061	<0.00048	<0.00048	<0.00034	<0.00035	<0.00063	<0.00037	<0.0005	<0.0017
	15	SV60-15.0-SO	11/21/2018	T183494	<10	<0.022	<10	<0.00047	<0.00041	<0.00055	<0.00052	<0.00041	<0.00042	<0.0003	<0.00031	<0.00055	<0.00032	<0.00043	<0.0015
B61	5	B61-5.0	9/10/2018	T182803	<10	<0.029	<10	<0.00063	<0.00055	<0.00073	<0.0007	<0.00055	<0.00056	<0.0004	<0.00041	<0.00073	<0.00042	<0.00057	<0.0019
	10	B61-10.0	9/10/2018	T182803	<10	<0.03	<10	<0.00089	<0.00078	<0.001	<0.00099	<0.00078	<0.00079	<0.00056	<0.00058	<0.001	<0.0006	<0.00081	<0.0028
	15	B61-15.0	9/10/2018	T182803	<10	<0.026	<10	<0.00051	<0.00044	<0.00059	<0.00056	<0.00044	<0.00045	<0.00032	<0.00033	<0.00059	<0.00034	<0.00046	<0.0016

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,4-Dichloro-2-butene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	Pyridine	2-chlorotoluene	4-chlorotoluene	4-Methyl-2-pentanone	Acetone
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					0.036							410			58	470	440		
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					0.036	1800	0.46	2.5	270	0.0021		1600	2.6		78	1600	1600	33000	61000
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02	5	B02-5.0	9/10/2018	T182803	<0.00052	<0.00047	<0.0007	<0.00058	<0.00051	-	<0.00055	<0.0005	<0.0005	<0.0005	-	<0.00046	<0.00055	-	-
	10	B02-10.0	9/10/2018	T182803	<0.00054	<0.00048	<0.00073	<0.0006	<0.00053	-	<0.00057	<0.00051	<0.00051	<0.00052	-	<0.00048	<0.00057	-	-
	15	B02-15.0	9/10/2018	T182803	<0.00064	<0.00058	<0.00087	<0.00072	<0.00063	-	<0.00068	<0.00061	<0.00061	<0.00062	-	<0.00057	<0.00069	-	-
B04	2.5	B04-2.5	9/19/2018	T182898	<0.00038	<0.00034	<0.00052	<0.00043	<0.00037	-	<0.0004	<0.00037	<0.00036	<0.00037	<0.03	<0.00034	<0.00041	-	-
		B04-2.5 DUP	9/19/2018	T182898	<0.00041	<0.00037	<0.00056	<0.00046	<0.0004	-	<0.00044	<0.00039	<0.00039	<0.0004	<0.03	<0.00036	<0.00044	-	-
	5	B04-5.0	9/19/2018	T182898	<0.00062	<0.00056	<0.00084	<0.0007	<0.00061	-	<0.00066	<0.0006	<0.00059	<0.0006	<0.03	<0.00055	<0.00066	-	-
B05	5	B05-5.0	8/31/2018	T182726	<0.00053	<0.00048	<0.00072	<0.00059	<0.00052	-	<0.00056	<0.00051	<0.00051	<0.00051	-	<0.00047	<0.00057	-	-
	10	B05-10.0	8/31/2018	T182726	<0.00047	<0.00043	<0.00064	<0.00053	<0.00047	-	<0.0005	<0.00045	<0.00045	<0.00046	-	<0.00042	<0.00051	-	-
	15	B05-15.0	8/31/2018	T182726	<0.00048	<0.00044	<0.00066	<0.00054	<0.00048	-	<0.00051	<0.00046	<0.00046	<0.00047	-	<0.00043	<0.00052	-	-
B45	0.5	B45-0.5	10/20/2018	T183211	<0.00093	<0.00084	<0.0013	<0.001	<0.00091	-	<0.00098	<0.00089	<0.00089	<0.00089	-	<0.00082	<0.00099	-	-
	1.5	B45-1.5	10/20/2018	T183211	<0.00055	<0.0005	<0.00075	<0.00062	<0.00054	-	<0.00058	<0.00053	<0.00053	<0.00053	-	<0.00049	<0.00059	-	-
	2.5	B45-2.5	10/20/2018	T183211	<0.00083	<0.00075	<0.0011	<0.00093	<0.00081	-	<0.00088	<0.00079	<0.00079	<0.0008	-	<0.00073	<0.00088	-	-
B46	0.5	B46-0.5	10/20/2018	T183212	<0.00084	<0.00076	<0.0011	<0.00094	<0.00083	-	<0.00089	<0.00081	<0.0008	<0.00081	-	<0.00074	<0.0009	-	-
		B46-0.5dup	10/20/2018	T183212	<0.00071	<0.00064	<0.00096	<0.00079	<0.0007	-	<0.00075	<0.00068	<0.00068	<0.00068	-	<0.00063	<0.00076	-	-
	1.5	B46-1.5	10/20/2018	T183212	<0.001	<0.00092	<0.0014	<0.0011	<0.001	-	<0.0011	<0.00098	<0.00097	<0.00098	-	<0.0009	<0.0011	-	-
		B46-1.5dup	10/20/2018	T183212	<0.00098	<0.00088	<0.0013	<0.0011	<0.00096	-	<0.001	<0.00094	<0.00094	<0.00094	-	<0.00087	<0.001	-	-
	2.5	B46-2.5	10/20/2018	T183212	<0.00062	<0.00056	<0.00084	<0.00069	<0.00061	-	<0.00066	<0.00059	<0.00059	<0.0006	-	<0.00055	<0.00066	-	-
		B46-2.5dup	10/20/2018	T183212	<0.00074	<0.00067	<0.001	<0.00083	<0.00073	-	<0.00079	<0.00071	<0.00071	<0.00072	-	<0.00066	<0.00079	-	-
B53	5	B53-5.0	9/10/2018	T182803	<0.00047	<0.00042	<0.00064	<0.00052	<0.00046	-	<0.0005	<0.00045	<0.00045	<0.00045	-	<0.00042	<0.0005	-	-
	10	B53-10.0	9/10/2018	T182803	<0.00052	<0.00047	<0.0007	<0.00058	<0.00051	-	<0.00055	<0.0005	<0.0005	<0.0005	-	<0.00046	<0.00055	-	-
	15	B53-15.0	9/10/2018	T182803	<0.00052	<0.00047	<0.00071	<0.00058	<0.00051	-	<0.00055	<0.0005	<0.0005	<0.0005	-	<0.00046	<0.00056	-	-
B55	5	B55-5.0	11/19/2018	T183454	<0.00075	<0.00067	<0.001	<0.00084	<0.00073	-	<0.00079	<0.00072	<0.00071	<0.00072	-	<0.00066	<0.0008	-	-
		B55-5.0-DUP	11/19/2018	T183454	<0.00067	<0.00061	<0.00091	<0.00075	<0.00066	-	<0.00071	<0.00064	<0.00064	<0.00065	-	<0.0006	<0.00072	-	-
	10	SV55-10.0	11/21/2018	T183494	<0.00058	<0.00053	<0.00079	<0.00065	<0.00057	-	<0.00062	<0.00056	<0.00056	<0.00056	-	<0.00052	<0.00062	-	-
	15	SV55-15.0-SO	11/21/2018	T183494	<0.00051	<0.00046	<0.00069	<0.00057	<0.0005	-	<0.00054	<0.00049	<0.00049	<0.00049	-	<0.00045	<0.00055	-	-
B56	5	B56-5.0	11/19/2018	T183454	<0.00071	<0.00064	<0.00096	<0.00079	<0.00069	-	<0.00075	<0.00068	<0.00067	<0.00068	-	<0.00063	<0.00075	-	-
	10	SV56-10.0	11/21/2018	T183494	<0.00056	<0.00051	<0.00076	<0.00063	<0.00055	-	<0.00059	<0.00054	<0.00053	<0.00054	-	<0.0005	<0.0006	-	-
	15	SV56-15.0-SO	11/21/2018	T183494	<0.00053	<0.00048	<0.00072	<0.0006	<0.00052	-	<0.00056	<0.00051	<0.00051	<0.00051	-	<0.00047	<0.00057	-	-
B57	5	B57-5.0	9/10/2018	T182803	<0.00054	<0.00049	<0.00074	<0.00061	<0.00054	-	<0.00058	<0.00052	<0.00052	<0.00052	<0.03	<0.00048	<0.00058	-	-
	10	B57-10.0	9/10/2018	T182803	<0.00046	<0.00042	<0.00063	<0.00052	<0.00045	-	<0.00049	<0.00044	<0.00044	<0.00044	<0.03	<0.00041	<0.00049	-	-
	15	B57-15.0	9/10/2018	T182803	<0.00044	<0.0004	<0.0006	<0.0005	<0.00043	-	<0.00047	<0.00042	<0.00042	<0.00043	<0.03	<0.00039	<0.00047	-	-
B60	5	B60-5.0	11/19/2018	T183454	<0.00048	<0.00043	<0.00065	<0.00054	<0.00047	-	<0.00051	<0.00046	<0.00046	<0.00046	-	<0.00043	<0.00051	-	-
	10	SV60-10.0	11/21/2018	T183494	<0.00049	<0.00045	<0.00067	<0.00055	<0.00049	-	<0.00052	<0.00047	<0.00047	<0.00048	-	<0.00044	<0.00053	-	-
	15	SV60-15.0-SO	11/21/2018	T183494	<0.00043	<0.00039	<0.00058	<0.00048	<0.00042	-	<0.00045	<0.00041	<0.00041	<0.00041	-	<0.00038	<0.00046	-	-
B61	5	B61-5.0	9/10/2018	T182803	<0.00057	<0.00051	<0.00077	<0.00064	<0.00056	-	<0.0006	<0.00054	<0.00054	<0.00055	-	<0.0005	<0.00061	-	-
	10	B61-10.0	9/10/2018	T182803	<0.00081	<0.00073	<0.0011	<0.0009	<0.00079	-	<0.00086	<0.00077	<0.00077	<0.00078	-	<0.00071	<0.00086	-	-
	15	B61-15.0	9/10/2018	T182803	<0.00046	<0.00041	<0.00062	<0.00051	<0.00045	-	<0.00049	<0.00044	<0.00044	<0.00044	-	<0.00041	<0.00049	-	-

Table 4
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Alexander Hamilton High School, Los Angeles, California

					VOCs													
					Allyl chloride	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019						0.33			0.29	19		0.65		0.94				18
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					0.72	1.2	290	150	0.29	19	6.8	0.65	280	8.3	14000	0.32	110	160
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02	5	B02-5.0	9/10/2018	T182803	-	<0.00044	<0.00048	<0.00045	<0.00046	<0.00078	<0.00049	<0.00035	<0.00054	<0.0017	<0.0005	<0.0006	<0.00057	<0.00024
	10	B02-10.0	9/10/2018	T182803	-	<0.00046	<0.00049	<0.00046	<0.00048	<0.0008	<0.00051	<0.00036	<0.00055	<0.0018	<0.00052	<0.00062	<0.00059	<0.00025
	15	B02-15.0	9/10/2018	T182803	-	<0.00055	<0.00059	<0.00056	<0.00057	<0.00096	<0.00061	<0.00043	<0.00066	<0.0021	<0.00062	<0.00074	<0.00071	<0.0003
B04	2.5	B04-2.5	9/19/2018	T182898	-	<0.00033	<0.00035	<0.00033	<0.00034	<0.00057	<0.00036	<0.00026	<0.00039	<0.0012	<0.00037	<0.00044	<0.00042	<0.00018
		B04-2.5 DUP	9/19/2018	T182898	-	<0.00035	<0.00038	<0.00036	<0.00037	<0.00062	<0.00039	<0.00028	<0.00043	<0.0013	<0.0004	<0.00048	<0.00045	<0.00019
	5	B04-5.0	9/19/2018	T182898	-	<0.00053	<0.00057	<0.00054	<0.00056	<0.00093	<0.00059	<0.00042	<0.00064	<0.002	<0.0006	<0.00072	<0.00069	<0.00029
B05	5	B05-5.0	8/31/2018	T182726	-	<0.00045	<0.00049	<0.00046	<0.00047	<0.00079	<0.0005	<0.00036	<0.00055	<0.0017	<0.00051	<0.00061	<0.00058	<0.00025
	10	B05-10.0	8/31/2018	T182726	-	<0.00041	<0.00044	<0.00041	<0.00042	<0.00071	<0.00045	<0.00032	<0.00049	<0.0016	<0.00046	<0.00055	<0.00052	<0.00022
	15	B05-15.0	8/31/2018	T182726	-	<0.00041	<0.00045	<0.00042	<0.00043	<0.00072	<0.00046	<0.00032	<0.0005	<0.0016	<0.00047	<0.00056	<0.00053	<0.00023
B45	0.5	B45-0.5	10/20/2018	T183211	-	<0.00079	<0.00085	<0.0008	<0.00083	<0.0014	<0.00088	<0.00062	<0.00096	<0.003	<0.00089	<0.0011	<0.001	<0.00043
	1.5	B45-1.5	10/20/2018	T183211	-	<0.00047	<0.00051	<0.00048	<0.00049	<0.00082	<0.00052	<0.00037	<0.00057	<0.0018	<0.00053	<0.00064	<0.00061	<0.00026
	2.5	B45-2.5	10/20/2018	T183211	-	<0.00071	<0.00076	<0.00072	<0.00074	<0.0012	<0.00079	<0.00055	<0.00085	<0.0027	<0.0008	<0.00096	<0.00091	<0.00039
B46	0.5	B46-0.5	10/20/2018	T183212	-	<0.00072	<0.00077	<0.00073	<0.00075	<0.0013	<0.0008	<0.00056	<0.00087	<0.0027	<0.00081	<0.00097	<0.00093	<0.00039
		B46-0.5dup	10/20/2018	T183212	-	<0.00061	<0.00065	<0.00061	<0.00063	<0.0011	<0.00067	<0.00047	<0.00073	<0.0023	<0.00068	<0.00082	<0.00078	<0.00033
	1.5	B46-1.5	10/20/2018	T183212	-	<0.00087	<0.00094	<0.00088	<0.00091	<0.0015	<0.00097	<0.00068	<0.0011	<0.0033	<0.00098	<0.0012	<0.0011	<0.00048
		B46-1.5dup	10/20/2018	T183212	-	<0.00084	<0.0009	<0.00085	<0.00087	<0.0015	<0.00093	<0.00066	<0.001	<0.0032	<0.00095	<0.0011	<0.0011	<0.00046
	2.5	B46-2.5	10/20/2018	T183212	-	<0.00053	<0.00057	<0.00054	<0.00055	<0.00093	<0.00059	<0.00042	<0.00064	<0.002	<0.0006	<0.00072	<0.00068	<0.00029
		B46-2.5dup	10/20/2018	T183212	-	<0.00064	<0.00068	<0.00064	<0.00066	<0.0011	<0.00071	<0.0005	<0.00077	<0.0024	<0.00072	<0.00086	<0.00082	<0.00035
B53	5	B53-5.0	9/10/2018	T182803	-	<0.0004	<0.00043	<0.00041	<0.00042	<0.0007	<0.00045	<0.00031	<0.00048	<0.0015	<0.00045	<0.00054	<0.00052	<0.00022
	10	B53-10.0	9/10/2018	T182803	-	<0.00044	<0.00048	<0.00045	<0.00046	<0.00078	<0.00049	<0.00035	<0.00054	<0.0017	<0.0005	<0.0006	<0.00057	<0.00024
	15	B53-15.0	9/10/2018	T182803	-	<0.00045	<0.00048	<0.00045	<0.00047	<0.00078	<0.0005	<0.00035	<0.00054	<0.0017	<0.0005	<0.0006	<0.00057	<0.00024
B55	5	B55-5.0	11/19/2018	T183454	-	<0.00064	<0.00069	<0.00065	<0.00067	<0.0011	<0.00071	<0.0005	<0.00077	<0.0024	<0.00072	<0.00086	<0.00082	<0.00035
		B55-5.0-DUP	11/19/2018	T183454	-	<0.00057	<0.00062	<0.00058	<0.0006	<0.001	<0.00064	<0.00045	<0.00069	<0.0022	<0.00065	<0.00078	<0.00074	<0.00031
	10	SV55-10.0	11/21/2018	T183494	-	<0.0005	<0.00054	<0.00051	<0.00052	<0.00088	<0.00056	<0.00039	<0.0006	<0.0019	<0.00056	<0.00068	<0.00064	<0.00027
	15	SV55-15.0-SO	11/21/2018	T183494	-	<0.00044	<0.00047	<0.00044	<0.00046	<0.00077	<0.00049	<0.00034	<0.00053	<0.0017	<0.00049	<0.00059	<0.00056	<0.00024
B56	5	B56-5.0	11/19/2018	T183454	-	<0.0006	<0.00065	<0.00061	<0.00063	<0.0011	<0.00067	<0.00047	<0.00073	<0.0023	<0.00068	<0.00082	<0.00078	<0.00033
	10	SV56-10.0	11/21/2018	T183494	-	<0.00048	<0.00051	<0.00048	<0.0005	<0.00084	<0.00053	<0.00037	<0.00058	<0.0018	<0.00054	<0.00065	<0.00062	<0.00026
	15	SV56-15.0-SO	11/21/2018	T183494	-	<0.00046	<0.00049	<0.00046	<0.00048	<0.0008	<0.00051	<0.00036	<0.00055	<0.0017	<0.00051	<0.00062	<0.00059	<0.00025
B57	5	B57-5.0	9/10/2018	T182803	-	<0.00047	<0.0005	<0.00047	<0.00049	<0.00082	<0.00052	<0.00037	<0.00056	<0.0018	<0.00053	<0.00063	<0.0006	<0.00025
	10	B57-10.0	9/10/2018	T182803	-	<0.00039	<0.00042	<0.0004	<0.00041	<0.00069	<0.00044	<0.00031	<0.00048	<0.0015	<0.00045	<0.00053	<0.00051	<0.00022
	15	B57-15.0	9/10/2018	T182803	-	<0.00038	<0.00041	<0.00038	<0.0004	<0.00066	<0.00042	<0.0003	<0.00046	<0.0014	<0.00043	<0.00051	<0.00049	<0.00021
B60	5	B60-5.0	11/19/2018	T183454	-	<0.00041	<0.00044	<0.00042	<0.00043	<0.00072	<0.00046	<0.00032	<0.0005	<0.0016	<0.00046	<0.00056	<0.00053	<0.00022
	10	SV60-10.0	11/21/2018	T183494	-	<0.00042	<0.00045	<0.00043	<0.00044	<0.00074	<0.00047	<0.00033	<0.00051	<0.0016	<0.00048	<0.00057	<0.00054	<0.00023
	15	SV60-15.0-SO	11/21/2018	T183494	-	<0.00037	<0.00039	<0.00037	<0.00038	<0.00064	<0.00041	<0.00029	<0.00044	<0.0014	<0.00041	<0.0005	<0.00047	<0.0002
B61	5	B61-5.0	9/10/2018	T182803	-	<0.00049	<0.00052	<0.00049	<0.00051	<0.00085	<0.00054	<0.00038	<0.00059	<0.0019	<0.00055	<0.00066	<0.00063	<0.00027
	10	B61-10.0	9/10/2018	T182803	-	<0.00069	<0.00074	<0.0007	<0.00072	<0.0012	<0.00077	<0.00054	<0.00083	<0.0026	<0.00078	<0.00093	<0.00089	<0.00038
	15	B61-15.0	9/10/2018	T182803	-	<0.00039	<0.00042	<0.0004	<0.00041	<0.00069	<0.00044	<0.00031	<0.00047	<0.0015	<0.00044	<0.00053	<0.00051	<0.00021

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	cis-1,3-dichloropropene	cis-1,4-Dichloro-2-butene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Diisopropyl ether	Ethylbenzene	Ethyl-t-Butyl Ether	Freon 113	Hexachlorobutadiene	Isopropylbenzene	Methyl Ethyl Ketone	Methyl Tertiary Butyl Ether	Naphthalene	n-butylbenzene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019									2.2					1.2				2	2400
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019						0.0074	24	87	57	2200	5.8		6700	1.2	1900	27000	47	3.8	3900
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02	5	B02-5.0	9/10/2018	T182803	<0.00036	-	<0.00048	<0.00039	<0.00042	-	<0.00045	-	-	<0.00059	<0.00045	-	-	<0.00021	<0.00039
	10	B02-10.0	9/10/2018	T182803	<0.00038	-	<0.00049	<0.00041	<0.00044	-	<0.00046	-	-	<0.00061	<0.00046	-	-	<0.00022	<0.0004
	15	B02-15.0	9/10/2018	T182803	<0.00045	-	<0.00059	<0.00049	<0.00052	-	<0.00055	-	-	<0.00073	<0.00055	-	-	<0.00026	<0.00048
B04	2.5	B04-2.5	9/19/2018	T182898	<0.00027	-	<0.00035	<0.00029	<0.00031	-	<0.00033	-	-	<0.00043	<0.00033	-	-	<0.00015	<0.00028
		B04-2.5 DUP	9/19/2018	T182898	<0.00029	-	<0.00038	<0.00031	<0.00034	-	<0.00036	-	-	<0.00047	<0.00036	-	-	<0.00017	<0.00031
	5	B04-5.0	9/19/2018	T182898	<0.00044	-	<0.00057	<0.00047	<0.00051	-	<0.00054	-	-	<0.00071	<0.00054	-	-	<0.00025	<0.00046
B05	5	B05-5.0	8/31/2018	T182726	<0.00037	-	<0.00049	<0.0004	<0.00043	-	<0.00046	-	-	<0.0006	<0.00046	-	-	<0.00021	<0.0004
	10	B05-10.0	8/31/2018	T182726	<0.00033	-	<0.00044	<0.00036	<0.00039	-	<0.00041	-	-	<0.00054	<0.00041	-	-	<0.00019	<0.00035
	15	B05-15.0	8/31/2018	T182726	<0.00034	-	<0.00045	<0.00037	<0.0004	-	<0.00042	-	-	<0.00055	<0.00042	-	-	<0.00019	<0.00036
B45	0.5	B45-0.5	10/20/2018	T183211	<0.00065	-	<0.00085	<0.0007	<0.00076	-	<0.0008	-	-	<0.0011	<0.0008	-	-	<0.00037	<0.00069
	1.5	B45-1.5	10/20/2018	T183211	<0.00039	-	<0.00051	<0.00042	<0.00045	-	<0.00047	-	-	<0.00063	<0.00047	-	-	<0.00022	<0.00041
	2.5	B45-2.5	10/20/2018	T183211	<0.00058	-	<0.00076	<0.00063	<0.00068	-	<0.00071	-	-	<0.00094	<0.00071	-	-	<0.00033	<0.00062
B46	0.5	B46-0.5	10/20/2018	T183212	<0.00059	-	<0.00077	<0.00064	<0.00069	-	<0.00072	-	-	<0.00096	<0.00072	-	-	<0.00034	<0.00063
		B46-0.5dup	10/20/2018	T183212	<0.0005	-	<0.00065	<0.00054	<0.00058	-	<0.00061	-	-	<0.00081	<0.00061	-	-	<0.00028	<0.00053
	1.5	B46-1.5	10/20/2018	T183212	<0.00071	-	<0.00094	<0.00077	<0.00083	-	<0.00088	-	-	<0.0012	<0.00088	-	-	<0.00041	<0.00076
		B46-1.5dup	10/20/2018	T183212	<0.00069	-	<0.0009	<0.00074	<0.0008	-	<0.00084	-	-	<0.0011	<0.00084	-	-	<0.00039	<0.00073
	2.5	B46-2.5	10/20/2018	T183212	<0.00043	-	<0.00057	<0.00047	<0.00051	-	<0.00053	-	-	<0.00071	<0.00053	-	-	<0.00025	<0.00046
		B46-2.5dup	10/20/2018	T183212	<0.00052	-	<0.00068	<0.00056	<0.00061	-	<0.00064	-	-	<0.00085	<0.00064	-	-	<0.0003	<0.00055
B53	5	B53-5.0	9/10/2018	T182803	<0.00033	-	<0.00043	<0.00036	<0.00038	-	<0.0004	-	-	<0.00053	<0.0004	-	-	<0.00019	<0.00035
	10	B53-10.0	9/10/2018	T182803	<0.00036	-	<0.00048	<0.00039	<0.00042	-	<0.00045	-	-	<0.00059	<0.00045	-	-	<0.00021	<0.00039
	15	B53-15.0	9/10/2018	T182803	<0.00036	-	<0.00048	<0.0004	<0.00043	-	<0.00045	-	-	<0.00059	<0.00045	-	-	<0.00021	<0.00039
B55	5	B55-5.0	11/19/2018	T183454	<0.00052	-	<0.00069	<0.00057	<0.00061	-	<0.00064	-	-	<0.00085	<0.00064	-	-	<0.0003	<0.00056
		B55-5.0-DUP	11/19/2018	T183454	<0.00047	-	<0.00062	<0.00051	<0.00055	-	<0.00058	-	-	<0.00076	<0.00058	-	-	<0.00027	<0.0005
	10	SV55-10.0	11/21/2018	T183494	<0.00041	-	<0.00054	<0.00044	<0.00048	-	<0.0005	-	-	<0.00066	<0.0005	-	-	<0.00023	<0.00044
	15	SV55-15.0-SO	11/21/2018	T183494	<0.00036	-	<0.00047	<0.00039	<0.00042	-	<0.00044	-	-	<0.00058	<0.00044	-	-	<0.00021	<0.00038
B56	5	B56-5.0	11/19/2018	T183454	<0.0005	-	<0.00065	<0.00054	<0.00058	-	<0.00061	-	-	<0.0008	<0.00061	-	-	<0.00028	<0.00053
	10	SV56-10.0	11/21/2018	T183494	<0.00039	-	<0.00051	<0.00042	<0.00046	-	<0.00048	-	-	<0.00064	<0.00048	-	-	<0.00022	<0.00042
	15	SV56-15.0-SO	11/21/2018	T183494	<0.00037	-	<0.00049	<0.0004	<0.00044	-	<0.00046	-	-	<0.00061	<0.00046	-	-	<0.00021	<0.0004
B57	5	B57-5.0	9/10/2018	T182803	<0.00038	-	<0.0005	<0.00041	<0.00045	-	<0.00047	-	-	<0.00062	<0.00047	-	-	<0.00022	<0.00041
	10	B57-10.0	9/10/2018	T182803	<0.00032	-	<0.00042	<0.00035	<0.00038	-	<0.0004	-	-	<0.00052	<0.0004	-	-	<0.00019	<0.00034
	15	B57-15.0	9/10/2018	T182803	<0.00031	-	<0.00041	<0.00034	<0.00036	-	<0.00038	-	-	<0.0005	<0.00038	-	-	<0.00018	<0.00033
B60	5	B60-5.0	11/19/2018	T183454	<0.00034	-	<0.00044	<0.00036	<0.00039	-	<0.00041	-	-	<0.00055	<0.00041	-	-	<0.00019	<0.00036
	10	SV60-10.0	11/21/2018	T183494	<0.00035	-	<0.00045	<0.00038	<0.0004	-	<0.00043	-	-	<0.00056	<0.00043	-	-	<0.0002	<0.00037
	15	SV60-15.0-SO	11/21/2018	T183494	<0.0003	-	<0.00039	<0.00032	<0.00035	-	<0.00037	-	-	<0.00049	<0.00037	-	-	<0.00017	<0.00032
B61	5	B61-5.0	9/10/2018	T182803	<0.0004	-	<0.00052	<0.00043	<0.00046	-	<0.00049	-	-	<0.00065	<0.00049	-	-	<0.00023	<0.00042
	10	B61-10.0	9/10/2018	T182803	<0.00057	-	<0.00074	<0.00061	<0.00066	-	<0.0007	-	-	<0.00092	<0.0007	-	-	<0.00032	<0.0006
	15	B61-15.0	9/10/2018	T182803	<0.00032	-	<0.00042	<0.00035	<0.00038	-	<0.0004	-	-	<0.00052	<0.0004	-	-	<0.00018	<0.00034

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-Amyl-Methyl Ether	tert-Butyl alcohol	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019							2200	5600			2200	0.59	1100	130			1200	0.0082
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					3800		7800	6000			7800	24	4900	1600		0.94	23000	0.059
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B02	5	B02-5.0	9/10/2018	T182803	<0.00047	<0.00043	<0.00048	<0.00041	-	-	<0.00045	<0.00059	<0.00046	<0.00051	<0.00035	<0.00055	<0.00038	<0.00055
	10	B02-10.0	9/10/2018	T182803	<0.00048	<0.00044	<0.0005	<0.00042	-	-	<0.00047	<0.00061	<0.00048	<0.00052	<0.00036	<0.00057	<0.00039	<0.00057
	15	B02-15.0	9/10/2018	T182803	<0.00058	<0.00053	<0.00059	<0.0005	-	-	<0.00056	<0.00073	<0.00057	<0.00063	<0.00043	<0.00068	<0.00047	<0.00068
B04	2.5	B04-2.5	9/19/2018	T182898	<0.00034	<0.00032	<0.00035	<0.0003	-	-	<0.00033	<0.00044	<0.00034	<0.00037	<0.00026	<0.0004	<0.00028	<0.0004
		B04-2.5 DUP	9/19/2018	T182898	<0.00037	<0.00034	<0.00038	<0.00032	-	-	<0.00036	<0.00047	<0.00037	<0.0004	<0.00028	<0.00044	<0.0003	<0.00044
	5	B04-5.0	9/19/2018	T182898	<0.00056	<0.00051	<0.00057	<0.00049	-	-	<0.00054	<0.00071	<0.00056	<0.00061	<0.00042	<0.00066	<0.00046	<0.00066
B05	5	B05-5.0	8/31/2018	T182726	<0.00048	<0.00044	<0.00049	<0.00042	-	-	<0.00046	<0.0006	<0.00047	<0.00052	<0.00036	<0.00056	<0.00039	<0.00056
	10	B05-10.0	8/31/2018	T182726	<0.00043	<0.00039	<0.00044	<0.00037	-	-	<0.00041	<0.00054	<0.00042	<0.00046	<0.00032	<0.0005	<0.00035	<0.0005
	15	B05-15.0	8/31/2018	T182726	<0.00044	<0.0004	<0.00045	<0.00038	-	-	<0.00042	<0.00055	<0.00043	<0.00047	<0.00033	<0.00051	<0.00036	<0.00051
B45	0.5	B45-0.5	10/20/2018	T183211	<0.00083	<0.00077	<0.00086	<0.00073	-	-	<0.00081	<0.0011	<0.00083	<0.00091	<0.00063	<0.00098	<0.00068	<0.00098
	1.5	B45-1.5	10/20/2018	T183211	<0.00049	<0.00046	<0.00051	<0.00043	-	-	<0.00048	<0.00063	<0.00049	<0.00054	<0.00037	<0.00058	<0.0004	<0.00058
	2.5	B45-2.5	10/20/2018	T183211	<0.00074	<0.00068	<0.00076	<0.00065	-	-	<0.00072	<0.00094	<0.00074	<0.00081	<0.00056	<0.00087	<0.00061	<0.00088
B46	0.5	B46-0.5	10/20/2018	T183212	<0.00076	<0.0007	<0.00078	<0.00066	-	-	<0.00073	<0.00096	<0.00075	<0.00082	<0.00057	<0.00089	<0.00062	<0.00089
		B46-0.5dup	10/20/2018	T183212	<0.00064	<0.00059	<0.00065	<0.00056	-	-	<0.00062	<0.00081	<0.00063	<0.00069	<0.00048	<0.00075	<0.00052	<0.00075
	1.5	B46-1.5	10/20/2018	T183212	<0.00092	<0.00084	<0.00094	<0.0008	-	-	<0.00089	<0.0012	<0.00091	<0.001	<0.00069	<0.0011	<0.00075	<0.0011
		B46-1.5dup	10/20/2018	T183212	<0.00088	<0.00081	<0.0009	<0.00077	-	-	<0.00085	<0.0011	<0.00087	<0.00096	<0.00066	<0.001	<0.00072	<0.001
	2.5	B46-2.5	10/20/2018	T183212	<0.00056	<0.00051	<0.00057	<0.00049	-	-	<0.00054	<0.00071	<0.00055	<0.00061	<0.00042	<0.00066	<0.00046	<0.00066
		B46-2.5dup	10/20/2018	T183212	<0.00067	<0.00062	<0.00069	<0.00058	-	-	<0.00065	<0.00085	<0.00066	<0.00073	<0.0005	<0.00079	<0.00055	<0.00079
B53	5	B53-5.0	9/10/2018	T182803	<0.00042	<0.00039	<0.00043	<0.00037	-	-	<0.00041	<0.00053	<0.00042	<0.00046	<0.00032	<0.0005	<0.00034	<0.0005
	10	B53-10.0	9/10/2018	T182803	<0.00047	<0.00043	<0.00048	<0.00041	-	-	<0.00045	<0.00059	<0.00046	<0.00051	<0.00035	<0.00055	<0.00038	<0.00055
	15	B53-15.0	9/10/2018	T182803	<0.00047	<0.00043	<0.00048	<0.00041	-	-	<0.00045	<0.00059	<0.00047	<0.00051	<0.00035	<0.00055	<0.00038	<0.00055
B55	5	B55-5.0	11/19/2018	T183454	<0.00067	<0.00062	<0.00069	<0.00059	-	-	<0.00065	<0.00085	<0.00067	<0.00073	<0.0005	<0.00079	<0.00055	<0.00079
		B55-5.0-DUP	11/19/2018	T183454	<0.0006	<0.00056	<0.00062	<0.00053	-	-	<0.00059	<0.00077	<0.0006	<0.00066	<0.00045	<0.00071	<0.00049	<0.00071
	10	SV55-10.0	11/21/2018	T183494	<0.00053	<0.00048	<0.00054	<0.00046	-	-	<0.00051	<0.00067	<0.00052	<0.00057	<0.0004	<0.00062	<0.00043	<0.00062
	15	SV55-15.0-SO	11/21/2018	T183494	<0.00046	<0.00042	<0.00047	<0.0004	-	-	<0.00045	<0.00058	<0.00046	<0.0005	<0.00035	<0.00054	<0.00038	<0.00054
B56	5	B56-5.0	11/19/2018	T183454	<0.00064	<0.00058	<0.00065	<0.00056	-	-	<0.00062	<0.00081	<0.00063	<0.00069	<0.00048	<0.00075	<0.00052	<0.00075
	10	SV56-10.0	11/21/2018	T183494	<0.0005	<0.00046	<0.00052	<0.00044	-	-	<0.00049	<0.00064	<0.0005	<0.00055	<0.00038	<0.00059	<0.00041	<0.00059
	15	SV56-15.0-SO	11/21/2018	T183494	<0.00048	<0.00044	<0.00049	<0.00042	-	-	<0.00046	<0.00061	<0.00048	<0.00052	<0.00036	<0.00056	<0.00039	<0.00056
B57	5	B57-5.0	9/10/2018	T182803	<0.00049	<0.00045	<0.0005	<0.00043	-	-	<0.00048	<0.00062	<0.00049	<0.00053	<0.00037	<0.00058	<0.0004	<0.00058
	10	B57-10.0	9/10/2018	T182803	<0.00042	<0.00038	<0.00043	<0.00036	-	-	<0.0004	<0.00053	<0.00041	<0.00045	<0.00031	<0.00049	<0.00034	<0.00049
	15	B57-15.0	9/10/2018	T182803	<0.0004	<0.00037	<0.00041	<0.00035	-	-	<0.00039	<0.0005	<0.0004	<0.00043	<0.0003	<0.00047	<0.00033	<0.00047
B60	5	B60-5.0	11/19/2018	T183454	<0.00043	<0.0004	<0.00044	<0.00038	-	-	<0.00042	<0.00055	<0.00043	<0.00047	<0.00033	<0.00051	<0.00035	<0.00051
	10	SV60-10.0	11/21/2018	T183494	<0.00044	<0.00041	<0.00046	<0.00039	-	-	<0.00043	<0.00056	<0.00044	<0.00048	<0.00033	<0.00052	<0.00036	<0.00052
	15	SV60-15.0-SO	11/21/2018	T183494	<0.00039	<0.00035	<0.0004	<0.00034	-	-	<0.00037	<0.00049	<0.00038	<0.00042	<0.00029	<0.00045	<0.00031	<0.00045
B61	5	B61-5.0	9/10/2018	T182803	<0.00051	<0.00047	<0.00052	<0.00045	-	-	<0.0005	<0.00065	<0.00051	<0.00056	<0.00038	<0.0006	<0.00042	<0.0006
	10	B61-10.0	9/10/2018	T182803	<0.00073	<0.00067	<0.00075	<0.00063	-	-	<0.0007	<0.00092	<0.00072	<0.00079	<0.00055	<0.00085	<0.00059	<0.00086
	15	B61-15.0	9/10/2018	T182803	<0.00041	<0.00038	<0.00042	<0.00036	-	-	<0.0004	<0.00052	<0.00041	<0.00045	<0.00031	<0.00049	<0.00034	<0.00049

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Xylene (m & p)	Xylene (o)	Xylene Total
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019							
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019						650	
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg
B02	5	B02-5.0	9/10/2018	T182803	<0.00085	<0.00039	-
	10	B02-10.0	9/10/2018	T182803	<0.00087	<0.00041	-
	15	B02-15.0	9/10/2018	T182803	<0.001	<0.00048	-
B04	2.5	B04-2.5	9/19/2018	T182898	<0.00062	<0.00029	-
		B04-2.5 DUP	9/19/2018	T182898	<0.00067	<0.00031	-
	5	B04-5.0	9/19/2018	T182898	<0.001	<0.00047	-
B05	5	B05-5.0	8/31/2018	T182726	<0.00087	<0.0004	-
	10	B05-10.0	8/31/2018	T182726	<0.00077	<0.00036	-
	15	B05-15.0	8/31/2018	T182726	<0.00079	<0.00037	-
B45	0.5	B45-0.5	10/20/2018	T183211	<0.0015	<0.0007	-
	1.5	B45-1.5	10/20/2018	T183211	<0.0009	<0.00042	-
	2.5	B45-2.5	10/20/2018	T183211	<0.0013	<0.00062	-
B46	0.5	B46-0.5	10/20/2018	T183212	<0.0014	<0.00063	-
		B46-0.5dup	10/20/2018	T183212	<0.0012	<0.00054	-
	1.5	B46-1.5	10/20/2018	T183212	<0.0017	<0.00077	-
		B46-1.5dup	10/20/2018	T183212	<0.0016	<0.00074	-
	2.5	B46-2.5	10/20/2018	T183212	<0.001	<0.00047	-
		B46-2.5dup	10/20/2018	T183212	<0.0012	<0.00056	-
B53	5	B53-5.0	9/10/2018	T182803	<0.00076	<0.00035	-
	10	B53-10.0	9/10/2018	T182803	<0.00085	<0.00039	-
	15	B53-15.0	9/10/2018	T182803	<0.00085	<0.00039	-
B55	5	B55-5.0	11/19/2018	T183454	<0.0012	<0.00056	-
		B55-5.0-DUP	11/19/2018	T183454	<0.0011	<0.00051	-
	10	SV55-10.0	11/21/2018	T183494	<0.00095	<0.00044	-
	15	SV55-15.0-SO	11/21/2018	T183494	<0.00083	<0.00039	-
B56	5	B56-5.0	11/19/2018	T183454	<0.0012	<0.00053	-
	10	SV56-10.0	11/21/2018	T183494	<0.00091	<0.00042	-
	15	SV56-15.0-SO	11/21/2018	T183494	<0.00087	<0.0004	-
B57	5	B57-5.0	9/10/2018	T182803	<0.00089	<0.00041	-
	10	B57-10.0	9/10/2018	T182803	<0.00075	<0.00035	-
	15	B57-15.0	9/10/2018	T182803	<0.00072	<0.00033	-
B60	5	B60-5.0	11/19/2018	T183454	<0.00078	<0.00036	-
	10	SV60-10.0	11/21/2018	T183494	<0.00081	<0.00037	-
	15	SV60-15.0-SO	11/21/2018	T183494	<0.0007	<0.00032	-
B61	5	B61-5.0	9/10/2018	T182803	<0.00093	<0.00043	-
	10	B61-10.0	9/10/2018	T182803	<0.0013	<0.00061	-
	15	B61-15.0	9/10/2018	T182803	<0.00075	<0.00035	-

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					TPH														
					TPH as Diesel	TPH as Gasoline	TPH as Motor Oil	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2,4-trichlorobenzene	1,2,4-trimethylbenzene	1,2-dibromo-3-chloropropane
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								2	1700	0.6		3.6	83		40	0.0015	7.8		0.0043
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019								2	8100	0.6	1.1	3.6	230		63	0.0051	24	300	0.0053
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B62	5	B62-5.0	11/19/2018	T183454	<10	<0.027	**50**	<0.00073	<0.00064	<0.00085	<0.00082	<0.00064	<0.00065	<0.00046	<0.00048	<0.00085	<0.00049	<0.00067	<0.0023
	10	SV62-10.0	11/21/2018	T183494	<10	<0.021	<10	<0.00054	<0.00047	<0.00063	<0.0006	<0.00047	<0.00048	<0.00034	<0.00035	<0.00063	<0.00036	<0.00049	<0.0017
	15	SV62-15.0-SO	11/21/2018	T183494	<10	<0.031	<10	<0.00063	<0.00055	<0.00074	<0.0007	<0.00055	<0.00056	<0.0004	<0.00041	<0.00074	<0.00043	<0.00058	<0.002
B63	5	B63-5.0(19)	9/19/2018	T182898	<10	<0.021	<10	<0.00074	<0.00065	<0.00086	<0.00082	<0.00065	<0.00066	<0.00047	<0.00048	<0.00086	<0.0005	<0.00067	<0.0023
	10	B63-10.0(24)	9/19/2018	T182898	<10	<0.024	<10	<0.00064	<0.00056	<0.00075	<0.00072	<0.00056	<0.00057	<0.00041	<0.00042	<0.00075	<0.00043	<0.00059	<0.002
	15	B63-15.0(29)	9/19/2018	T182898	<10	<0.032	<10	<0.00069	<0.0006	<0.0008	<0.00076	<0.0006	<0.00061	<0.00043	<0.00045	<0.0008	<0.00046	<0.00063	<0.0021
B64	5	SV64-5.0 (17)	11/21/2018	T183494	<10	<0.025	<10	<0.00053	<0.00047	<0.00062	<0.00059	<0.00047	<0.00047	<0.00034	<0.00035	<0.00062	<0.00036	<0.00049	<0.0017
	10	SV64-10.0 (22)	11/21/2018	T183494	<10	<0.029	<10	<0.00066	<0.00058	<0.00077	<0.00074	<0.00058	<0.00059	<0.00042	<0.00043	<0.00077	<0.00045	<0.0006	<0.0021
	15	SV64-15.0 (27)	11/21/2018	T183494	<10	<0.03	<10	<0.00067	<0.00059	<0.00078	<0.00075	<0.00059	<0.0006	<0.00043	<0.00044	<0.00078	<0.00045	<0.00061	<0.0021
B65	5	B65-5.0	9/10/2018	T182803	<10	<0.02	<10	<0.00074	<0.00064	<0.00086	<0.00082	<0.00065	<0.00066	<0.00047	<0.00048	<0.00086	<0.0005	<0.00067	<0.0023
	10	B65-10.0	9/10/2018	T182803	<10	<0.028	<10	<0.00056	<0.00049	<0.00066	<0.00063	<0.00049	<0.0005	<0.00036	<0.00037	<0.00066	<0.00038	<0.00051	<0.0018
	15	B65-15.0	9/10/2018	T182803	<10	<0.022	<10	<0.00046	<0.0004	<0.00053	<0.00051	<0.0004	<0.00041	<0.00029	<0.0003	<0.00053	<0.00031	<0.00042	<0.0014
B85	0.5	B85-0.5	6/14/2019	416329	<10	<4.77	<20	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**0.00047**	<0.0055
		B85-0.5-DUP	6/14/2019	416329	<10	<2.94	<20	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
	1.5	B85-1.5	6/14/2019	416329	<10	<3.33	<20	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**0.00025**	<0.004
	2.5	B85-2.5	6/14/2019	416329	<10	<3.06	<20	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
B86	0.5	B86-0.5	6/14/2019	416329	<10	<3.66	<20	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	**0.00054**	<0.007
	1.5	B86-1.5	6/14/2019	416329	<10	<2.88	<20	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
	2.5	B86-2.5	6/14/2019	416329	<10	<2.46	<20	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
B98	0.5	B98-0.5	6/14/2019	416329	<10	<3	<20	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B98-1.5	6/14/2019	416329	<10	<3	<20	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B98-2.5	6/14/2019	416329	<10	<2.82	<20	-	-	-	-	-	-	-	-	-	-	-	-
B99	0.5	B99-0.5	6/14/2019	416329	<10	<2.88	<20	-	-	-	-	-	-	-	-	-	-	-	-
		B99-0.5-DUP	6/14/2019	416329	**11**	<3	<20	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B99-1.5	6/14/2019	416329	<10	<3	<20	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B99-2.5	6/14/2019	416329	<10	<2.46	<20	-	-	-	-	-	-	-	-	-	-	-	-
B100	0.5	B100-0.5	6/14/2019	416329	<10	<2.58	<20	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B100-1.5	6/14/2019	416329	<10	<3.06	<20	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B100-2.5	6/14/2019	416329	<10	<2.88	<20	-	-	-	-	-	-	-	-	-	-	-	-
B101	0.5	B101-0.5	6/14/2019	416329	<10	<2.82	<20	-	-	-	-	-	-	-	-	-	-	-	-
		B101-0.5-DUP	6/14/2019	416329	<20	<2.58	<40	-	-	-	-	-	-	-	-	-	-	-	-
B101	1.5	B101-1.5	6/14/2019	416329	<10	<2.79	<20	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B101-2.5	6/14/2019	416329	<10	<2.64	<20	-	-	-	-	-	-	-	-	-	-	-	-
B102	0.5	B102-0.5	6/14/2019	416329	<20	<2.67	<40	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B102-1.5	6/14/2019	416329	<10	<2.34	<20	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B102-2.5	6/14/2019	416329	<10	<2.58	<20	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,4-Dichloro-2-butene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	Pyridine	2-chlorotoluene	4-chlorotoluene	4-Methyl-2-pentanone	Acetone
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					0.036							410			58	470	440		
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					0.036	1800	0.46	2.5	270	0.0021		1600	2.6		78	1600	1600	33000	61000
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B62	5	B62-5.0	11/19/2018	T183454	<0.00067	<0.0006	<0.0009	<0.00075	<0.00065	-	<0.00071	<0.00064	<0.00064	<0.00064	-	<0.00059	<0.00071	-	-
	10	SV62-10.0	11/21/2018	T183494	<0.00049	<0.00044	<0.00067	<0.00055	<0.00048	-	<0.00052	<0.00047	<0.00047	<0.00047	-	<0.00044	<0.00053	-	-
	15	SV62-15.0-SO	11/21/2018	T183494	<0.00057	<0.00052	<0.00078	<0.00064	<0.00056	-	<0.00061	<0.00055	<0.00055	<0.00055	-	<0.00051	<0.00061	-	-
B63	5	B63-5.0(19)	9/19/2018	T182898	<0.00067	<0.00061	<0.00091	<0.00075	<0.00066	-	<0.00071	<0.00064	<0.00064	<0.00065	-	<0.00059	<0.00072	-	-
	10	B63-10.0(24)	9/19/2018	T182898	<0.00058	<0.00053	<0.00079	<0.00065	<0.00057	-	<0.00062	<0.00056	<0.00056	<0.00056	-	<0.00052	<0.00062	-	-
	15	B63-15.0(29)	9/19/2018	T182898	<0.00062	<0.00056	<0.00085	<0.0007	<0.00061	-	<0.00066	<0.0006	<0.0006	<0.0006	-	<0.00055	<0.00067	-	-
B64	5	SV64-5.0 (17)	11/21/2018	T183494	<0.00048	<0.00044	<0.00066	<0.00054	<0.00048	-	<0.00051	<0.00046	<0.00046	<0.00047	-	<0.00043	<0.00052	-	-
	10	SV64-10.0 (22)	11/21/2018	T183494	<0.0006	<0.00054	<0.00082	<0.00068	<0.00059	-	<0.00064	<0.00058	<0.00058	<0.00058	-	<0.00053	<0.00064	-	-
	15	SV64-15.0 (27)	11/21/2018	T183494	<0.00061	<0.00055	<0.00083	<0.00068	<0.0006	-	<0.00065	<0.00058	<0.00058	<0.00059	-	<0.00054	<0.00065	-	-
B65	5	B65-5.0	9/10/2018	T182803	<0.00067	<0.0006	<0.00091	<0.00075	<0.00066	-	<0.00071	<0.00064	<0.00064	<0.00064	-	<0.00059	<0.00071	-	-
	10	B65-10.0	9/10/2018	T182803	<0.00051	<0.00046	<0.00069	<0.00057	<0.0005	-	<0.00054	<0.00049	<0.00049	<0.00049	-	<0.00045	<0.00055	-	-
	15	B65-15.0	9/10/2018	T182803	<0.00042	<0.00038	<0.00057	<0.00047	<0.00041	-	<0.00044	<0.0004	<0.0004	<0.0004	-	<0.00037	<0.00044	-	-
B85	0.5	B85-0.5	6/14/2019	416329	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	-	<0.0055	<0.0055	<0.0055	**0.28**
		B85-0.5-DUP	6/14/2019	416329	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	-	<0.006	<0.006	<0.006	**0.16**
	1.5	B85-1.5	6/14/2019	416329	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	**0.092**
	2.5	B85-2.5	6/14/2019	416329	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	**0.051**
B86	0.5	B86-0.5	6/14/2019	416329	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	-	<0.007	<0.007	<0.007	**0.26**
	1.5	B86-1.5	6/14/2019	416329	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	-	<0.006	<0.006	<0.006	**0.17**
	2.5	B86-2.5	6/14/2019	416329	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	**0.055**
B98	0.5	B98-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B98-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B98-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B99	0.5	B99-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B99-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B99-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B99-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B100	0.5	B100-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B100-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B100-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	0.5	B101-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B101-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	1.5	B101-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B101-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B102	0.5	B102-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B102-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B102-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					VOCs													
					Allyl chloride	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019						0.33			0.29	19		0.65		0.94				18
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					0.72	1.2	290	150	0.29	19	6.8	0.65	280	8.3	14000	0.32	110	160
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B62	5	B62-5.0	11/19/2018	T183454	-	<0.00057	<0.00061	<0.00058	<0.0006	<0.001	<0.00063	<0.00045	<0.00069	<0.0022	<0.00064	<0.00077	<0.00073	<0.00031
	10	SV62-10.0	11/21/2018	T183494	-	<0.00042	<0.00045	<0.00043	<0.00044	<0.00074	<0.00047	<0.00033	<0.00051	<0.0016	<0.00047	<0.00057	<0.00054	<0.00023
	15	SV62-15.0-SO	11/21/2018	T183494	-	<0.00049	<0.00053	<0.0005	<0.00051	<0.00086	<0.00055	<0.00038	<0.00059	<0.0019	<0.00055	<0.00067	<0.00063	<0.00027
B63	5	B63-5.0(19)	9/19/2018	T182898	-	<0.00057	<0.00062	<0.00058	<0.0006	<0.001	<0.00064	<0.00045	<0.00069	<0.0022	<0.00065	<0.00078	<0.00074	<0.00031
	10	B63-10.0(24)	9/19/2018	T182898	-	<0.0005	<0.00054	<0.00051	<0.00052	<0.00088	<0.00056	<0.00039	<0.0006	<0.0019	<0.00056	<0.00068	<0.00064	<0.00027
	15	B63-15.0(29)	9/19/2018	T182898	-	<0.00053	<0.00057	<0.00054	<0.00056	<0.00093	<0.00059	<0.00042	<0.00064	<0.002	<0.0006	<0.00072	<0.00069	<0.00029
B64	5	SV64-5.0 (17)	11/21/2018	T183494	-	<0.00041	<0.00045	<0.00042	<0.00043	<0.00072	<0.00046	<0.00032	<0.0005	<0.0016	<0.00047	<0.00056	<0.00053	<0.00023
	10	SV64-10.0 (22)	11/21/2018	T183494	-	<0.00052	<0.00056	<0.00052	<0.00054	<0.0009	<0.00057	<0.0004	<0.00062	<0.002	<0.00058	<0.0007	<0.00066	<0.00028
	15	SV64-15.0 (27)	11/21/2018	T183494	-	<0.00052	<0.00056	<0.00053	<0.00054	<0.00091	<0.00058	<0.00041	<0.00063	<0.002	<0.00059	<0.00071	<0.00067	<0.00028
B65	5	B65-5.0	9/10/2018	T182803	-	<0.00057	<0.00062	<0.00058	<0.0006	<0.001	<0.00064	<0.00045	<0.00069	<0.0022	<0.00065	<0.00077	<0.00074	<0.00031
	10	B65-10.0	9/10/2018	T182803	-	<0.00044	<0.00047	<0.00044	<0.00046	<0.00077	<0.00049	<0.00034	<0.00053	<0.0017	<0.00049	<0.00059	<0.00056	<0.00024
	15	B65-15.0	9/10/2018	T182803	-	<0.00036	<0.00038	<0.00036	<0.00037	<0.00062	<0.0004	<0.00028	<0.00043	<0.0014	<0.0004	<0.00048	<0.00046	<0.00019
B85	0.5	B85-0.5	6/14/2019	416329	<0.0055	**0.0012**	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
		B85-0.5-DUP	6/14/2019	416329	<0.006	**0.0016**	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
	1.5	B85-1.5	6/14/2019	416329	<0.004	**0.00029**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	2.5	B85-2.5	6/14/2019	416329	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
B86	0.5	B86-0.5	6/14/2019	416329	<0.007	**0.00083**	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
	1.5	B86-1.5	6/14/2019	416329	<0.006	**0.00055**	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
	2.5	B86-2.5	6/14/2019	416329	<0.004	**0.0002**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
B98	0.5	B98-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B98-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B98-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B99	0.5	B99-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B99-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B99-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B99-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B100	0.5	B100-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B100-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B100-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	0.5	B101-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B101-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	1.5	B101-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B101-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B102	0.5	B102-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B102-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B102-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	cis-1,3-dichloropropene	cis-1,4-Dichloro-2-butene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Diisopropyl ether	Ethylbenzene	Ethyl-t-Butyl Ether	Freon 113	Hexachlorobutadiene	Isopropylbenzene	Methyl Ethyl Ketone	Methyl Tertiary Butyl Ether	Naphthalene	n-butylbenzene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019									2.2					1.2				2	2400
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019						0.0074	24	87	57	2200	5.8		6700	1.2	1900	27000	47	3.8	3900
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B62	5	B62-5.0	11/19/2018	T183454	<0.00047	-	<0.00061	<0.00051	<0.00054	-	<0.00057	-	-	<0.00076	<0.00057	-	-	<0.00027	<0.0005
	10	SV62-10.0	11/21/2018	T183494	<0.00034	-	<0.00045	<0.00037	<0.0004	-	<0.00042	-	-	<0.00056	<0.00042	-	-	<0.0002	<0.00037
	15	SV62-15.0-SO	11/21/2018	T183494	<0.0004	-	<0.00053	<0.00044	<0.00047	-	<0.0005	-	-	<0.00065	<0.0005	-	-	<0.00023	<0.00043
B63	5	B63-5.0(19)	9/19/2018	T182898	<0.00047	-	<0.00062	<0.00051	<0.00055	-	<0.00058	-	-	<0.00076	<0.00058	-	-	<0.00027	<0.0005
	10	B63-10.0(24)	9/19/2018	T182898	<0.00041	-	<0.00054	<0.00044	<0.00048	-	<0.0005	-	-	<0.00066	<0.0005	-	-	<0.00023	<0.00044
	15	B63-15.0(29)	9/19/2018	T182898	<0.00044	-	<0.00057	<0.00047	<0.00051	-	<0.00054	-	-	<0.00071	<0.00054	-	-	<0.00025	<0.00046
B64	5	SV64-5.0 (17)	11/21/2018	T183494	<0.00034	-	<0.00045	<0.00037	<0.0004	-	<0.00042	-	-	<0.00055	<0.00042	-	-	<0.00019	<0.00036
	10	SV64-10.0 (22)	11/21/2018	T183494	<0.00042	-	<0.00056	<0.00046	<0.00049	-	<0.00052	-	-	<0.00069	<0.00052	-	-	<0.00024	<0.00045
	15	SV64-15.0 (27)	11/21/2018	T183494	<0.00043	-	<0.00056	<0.00046	<0.0005	-	<0.00053	-	-	<0.00069	<0.00053	-	-	<0.00025	<0.00045
B65	5	B65-5.0	9/10/2018	T182803	<0.00047	-	<0.00062	<0.00051	<0.00055	-	<0.00058	-	-	<0.00076	<0.00058	-	-	<0.00027	<0.0005
	10	B65-10.0	9/10/2018	T182803	<0.00036	-	<0.00047	<0.00039	<0.00042	-	<0.00044	-	-	<0.00058	<0.00044	-	-	<0.00021	<0.00038
	15	B65-15.0	9/10/2018	T182803	<0.00029	-	<0.00038	<0.00032	<0.00034	-	<0.00036	-	-	<0.00047	<0.00036	-	-	<0.00017	<0.00031
B85	0.5	B85-0.5	6/14/2019	416329	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**0.00047**	<0.0055	<0.0055	<0.0055	<0.0055	**0.019**	<0.0055	<0.0055	<0.0055
		B85-0.5-DUP	6/14/2019	416329	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	**0.00028**	<0.006	<0.006	<0.006	<0.006	**0.015**	<0.006	<0.006	<0.006
	1.5	B85-1.5	6/14/2019	416329	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**0.008**	<0.004	<0.004	<0.004
	2.5	B85-2.5	6/14/2019	416329	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	**0.00018**	<0.0035	<0.0035	<0.0035	<0.0035	**0.0038**	<0.0035	<0.0035	<0.0035
B86	0.5	B86-0.5	6/14/2019	416329	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	**0.00035**	<0.007	<0.007	<0.007	<0.007	**0.021**	<0.007	<0.007	<0.007
	1.5	B86-1.5	6/14/2019	416329	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	**0.00031**	<0.006	<0.006	<0.006	<0.006	**0.014**	<0.006	<0.006	<0.006
	2.5	B86-2.5	6/14/2019	416329	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**0.00021**	<0.004	<0.004	<0.004	<0.004	**0.0045**	<0.004	<0.004	<0.004
B98	0.5	B98-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B98-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B98-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B99	0.5	B99-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B99-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B99-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B99-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B100	0.5	B100-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B100-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B100-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	0.5	B101-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B101-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	1.5	B101-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B101-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B102	0.5	B102-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B102-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B102-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Summary of Soil Analytical Results for TPH and VOCs
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Alexander Hamilton High School, Los Angeles, California

					n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-Amyl-Methyl Ether	tert-Butyl alcohol	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019							2200	5600			2200	0.59	1100	130			1200	0.0082
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					3800		7800	6000			7800	24	4900	1600		0.94	23000	0.059
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B62	5	B62-5.0	11/19/2018	T183454	<0.0006	<0.00055	<0.00062	<0.00052	-	-	<0.00058	<0.00076	<0.0006	<0.00065	<0.00045	<0.00071	<0.00049	<0.00071
	10	SV62-10.0	11/21/2018	T183494	**0.0054**	**0.0045**	<0.00045	<0.00039	-	-	<0.00043	<0.00056	**0.009**	<0.00048	<0.00033	<0.00052	<0.00036	<0.00052
	15	SV62-15.0-SO	11/21/2018	T183494	<0.00052	<0.00048	<0.00053	<0.00045	-	-	<0.0005	<0.00066	<0.00051	<0.00056	<0.00039	<0.00061	<0.00042	<0.00061
B63	5	B63-5.0(19)	9/19/2018	T182898	<0.0006	<0.00056	<0.00062	<0.00053	-	-	<0.00059	<0.00076	<0.0006	<0.00066	<0.00045	<0.00071	<0.00049	<0.00071
	10	B63-10.0(24)	9/19/2018	T182898	<0.00053	<0.00048	<0.00054	<0.00046	-	-	<0.00051	<0.00067	<0.00052	<0.00057	<0.0004	<0.00062	<0.00043	<0.00062
	15	B63-15.0(29)	9/19/2018	T182898	<0.00056	<0.00052	<0.00058	<0.00049	-	-	<0.00054	<0.00071	<0.00056	<0.00061	<0.00042	<0.00066	<0.00046	<0.00066
B64	5	SV64-5.0 (17)	11/21/2018	T183494	<0.00044	<0.0004	<0.00045	<0.00038	-	-	<0.00042	<0.00055	**0.0091**	<0.00047	<0.00033	<0.00051	<0.00036	<0.00051
	10	SV64-10.0 (22)	11/21/2018	T183494	<0.00054	<0.0005	<0.00056	<0.00047	-	-	<0.00053	<0.00069	<0.00054	<0.00059	<0.00041	<0.00064	<0.00044	<0.00064
	15	SV64-15.0 (27)	11/21/2018	T183494	<0.00055	<0.0005	<0.00056	<0.00048	-	-	<0.00053	<0.0007	<0.00054	<0.0006	<0.00041	<0.00065	<0.00045	<0.00065
B65	5	B65-5.0	9/10/2018	T182803	<0.0006	<0.00055	<0.00062	<0.00053	-	-	<0.00058	<0.00076	<0.0006	<0.00066	<0.00045	<0.00071	<0.00049	<0.00071
	10	B65-10.0	9/10/2018	T182803	<0.00046	<0.00042	<0.00047	<0.0004	-	-	<0.00045	<0.00058	<0.00046	<0.0005	<0.00035	<0.00054	<0.00038	<0.00054
	15	B65-15.0	9/10/2018	T182803	<0.00037	<0.00034	<0.00038	<0.00033	-	-	<0.00036	<0.00047	<0.00037	<0.00041	<0.00028	<0.00044	<0.00031	<0.00044
B85	0.5	B85-0.5	6/14/2019	416329	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**0.019**	<0.0055	<0.0055	**0.0014**	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
		B85-0.5-DUP	6/14/2019	416329	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012	<0.006	<0.006	**0.0011**	<0.006	<0.006	<0.006	<0.006	<0.006
	1.5	B85-1.5	6/14/2019	416329	<0.004	<0.004	<0.004	<0.004	<0.004	**0.0083**	<0.004	<0.004	**0.00053**	<0.004	<0.004	<0.004	<0.004	<0.004
	2.5	B85-2.5	6/14/2019	416329	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.00047**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
B86	0.5	B86-0.5	6/14/2019	416329	<0.007	<0.007	<0.007	<0.007	<0.007	<0.014	<0.007	<0.007	**0.0015**	<0.007	<0.007	<0.007	<0.007	<0.007
	1.5	B86-1.5	6/14/2019	416329	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012	<0.006	<0.006	**0.00069**	<0.006	<0.006	<0.006	<0.006	<0.006
	2.5	B86-2.5	6/14/2019	416329	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.00052**	<0.004	<0.004	<0.004	<0.004	<0.004
B98	0.5	B98-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B98-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B98-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B99	0.5	B99-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B99-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B99-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B99-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B100	0.5	B100-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B100-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B100-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	0.5	B101-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		B101-0.5-DUP	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B101	1.5	B101-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B101-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B102	0.5	B102-0.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.5	B102-1.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	B102-2.5	6/14/2019	416329	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					Xylene (m & p)	Xylene (o)	Xylene Total
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019							
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019						650	
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg
B62	5	B62-5.0	11/19/2018	T183454	<0.0011	<0.0005	-
	10	SV62-10.0	11/21/2018	T183494	<0.0008	<0.00037	-
	15	SV62-15.0-SO	11/21/2018	T183494	<0.00094	<0.00043	-
B63	5	B63-5.0(19)	9/19/2018	T182898	<0.0011	<0.00051	-
	10	B63-10.0(24)	9/19/2018	T182898	<0.00095	<0.00044	-
	15	B63-15.0(29)	9/19/2018	T182898	<0.001	<0.00047	-
B64	5	SV64-5.0 (17)	11/21/2018	T183494	<0.00079	<0.00037	-
	10	SV64-10.0 (22)	11/21/2018	T183494	<0.00098	<0.00046	-
	15	SV64-15.0 (27)	11/21/2018	T183494	<0.001	<0.00046	-
B65	5	B65-5.0	9/10/2018	T182803	<0.0011	<0.00051	-
	10	B65-10.0	9/10/2018	T182803	<0.00083	<0.00039	-
	15	B65-15.0	9/10/2018	T182803	<0.00068	<0.00031	-
B85	0.5	B85-0.5	6/14/2019	416329	**0.0016**	**0.00066**	**0.00226**
		B85-0.5-DUP	6/14/2019	416329	**0.0011**	**0.00048**	**0.00158**
	1.5	B85-1.5	6/14/2019	416329	**0.00086**	**0.00025**	**0.00111**
	2.5	B85-2.5	6/14/2019	416329	**0.00063**	**0.00021**	**0.00084**
B86	0.5	B86-0.5	6/14/2019	416329	**0.0014**	**0.00043**	**0.00183**
	1.5	B86-1.5	6/14/2019	416329	**0.0011**	**0.0003**	**0.0014**
	2.5	B86-2.5	6/14/2019	416329	**0.00075**	**0.00022**	**0.00097**
B98	0.5	B98-0.5	6/14/2019	416329	-	-	-
	1.5	B98-1.5	6/14/2019	416329	-	-	-
	2.5	B98-2.5	6/14/2019	416329	-	-	-
B99	0.5	B99-0.5	6/14/2019	416329	-	-	-
		B99-0.5-DUP	6/14/2019	416329	-	-	-
	1.5	B99-1.5	6/14/2019	416329	-	-	-
	2.5	B99-2.5	6/14/2019	416329	-	-	-
B100	0.5	B100-0.5	6/14/2019	416329	-	-	-
	1.5	B100-1.5	6/14/2019	416329	-	-	-
	2.5	B100-2.5	6/14/2019	416329	-	-	-
B101	0.5	B101-0.5	6/14/2019	416329	-	-	-
		B101-0.5-DUP	6/14/2019	416329	-	-	-
B101	1.5	B101-1.5	6/14/2019	416329	-	-	-
	2.5	B101-2.5	6/14/2019	416329	-	-	-
B102	0.5	B102-0.5	6/14/2019	416329	-	-	-
	1.5	B102-1.5	6/14/2019	416329	-	-	-
	2.5	B102-2.5	6/14/2019	416329	-	-	-

Table 4
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Alexander Hamilton High School, Los Angeles, California

					TPH														
					TPH as Diesel	TPH as Gasoline	TPH as Motor Oil	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2,4-trichlorobenzene	1,2,4-trimethylbenzene	1,2-dibromo-3-chloropropane
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019								2	1700	0.6		3.6	83		40	0.0015	7.8		0.0043
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019								2	8100	0.6	1.1	3.6	230		63	0.0051	24	300	0.0053
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B117	5	SV117-5.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	**0.00032J**	<0.0035
	10	SV117-10.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV117-15.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
		SV117-15.0-DUP	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV117-25.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
B118	5	SV118-5.0	11/23/2019	421801	-	-	-	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
	10	SV118-10.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV118-15.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV118-25.0	11/23/2019	421801	-	-	-	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
B119	5	SV119-5.0	11/23/2019	421801	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	10	SV119-10.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV119-15.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	25	SV119-25.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
B11DDD	5	SV122-5.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	10	SV122-10.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV122-15.0	11/23/2019	421801	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	25	SV122-25.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
		SV122-25.0-DUP	11/23/2019	421801	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B120	5	SV120-5.0	11/23/2019	421801	-	-	-	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
		SV120-5.0-DUP	11/23/2019	421801	-	-	-	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
	10	SV120-10.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV120-15.0	11/23/2019	421801	-	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
	25	SV120-25.0	11/23/2019	421801	-	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
B121	5	SV121-5.0	11/23/2019	421801	-	-	-	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	10	SV121-10.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV121-15.0	11/23/2019	421801	-	-	-	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV121-25.0	11/23/2019	421801	-	-	-	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045

Notes
mg/kg = milligrams per kilogram
- = not analyzed
< = not reported above analytical reporting limit shown
J - estimated value
ft bgs = feet below ground surface
HHRA- Human Health Risk Assessment
DTSC - Department of Toxic Substance Control
USEPA- Usited State Environmental Protection Agency

Table 4
Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,4-Dichloro-2-butene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	Pyridine	2-chlorotoluene	4-chlorotoluene	4-Methyl-2-pentanone	Acetone
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					0.036							410			58	470	440		
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					0.036	1800	0.46	2.5	270	0.0021		1600	2.6		78	1600	1600	33000	61000
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B117	5	SV117-5.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	10	SV117-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	15	SV117-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
		SV117-15.0-DUP	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	25	SV117-25.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
B118	5	SV118-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	-	<0.0045	<0.0045	<0.0045	<0.09
	10	SV118-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
	15	SV118-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	25	SV118-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	-	<0.0045	<0.0045	<0.0045	<0.09
B119	5	SV119-5.0	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	**0.087J**
	10	SV119-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
	15	SV119-15.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
	25	SV119-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
B11DDD	5	SV122-5.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
	10	SV122-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
	15	SV122-15.0	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.1
	25	SV122-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
		SV122-25.0-DUP	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.1
B120	5	SV120-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	-	<0.0045	<0.0045	<0.0045	**0.053J**
		SV120-5.0-DUP	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	-	<0.0045	<0.0045	<0.0045	**0.056J**
	10	SV120-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	15	SV120-15.0	11/23/2019	421801	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	<0.003	<0.003	<0.003	<0.06
	25	SV120-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004	<0.08
B121	5	SV121-5.0	11/23/2019	421801	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	-	<0.0055	<0.0055	<0.0055	<0.11
	10	SV121-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	15	SV121-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	-	<0.0035	<0.0035	<0.0035	<0.07
	25	SV121-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	-	<0.0045	<0.0045	<0.0045	<0.09

Notes
mg/kg = milligrams per kilogram
- = not analyzed
< = not reported above analytical reporting limit shown
J - estimated value
ft bgs = feet below ground surface
HHRA- Human Health Risk Assessment
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Table 4
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Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					VOCs													
					Allyl chloride	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019						0.33			0.29	19		0.65		0.94				18
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					0.72	1.2	290	150	0.29	19	6.8	0.65	280	8.3	14000	0.32	110	160
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B117	5	SV117-5.0	11/23/2019	421801	<0.0035	**0.0003J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	10	SV117-10.0	11/23/2019	421801	<0.0035	**0.0011J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV117-15.0	11/23/2019	421801	<0.0035	**0.00047J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
		SV117-15.0-DUP	11/23/2019	421801	<0.0035	**0.0004J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV117-25.0	11/23/2019	421801	<0.0035	**0.00015J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
B118	5	SV118-5.0	11/23/2019	421801	<0.0045	**0.00033J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
	10	SV118-10.0	11/23/2019	421801	<0.004	**0.00023J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV118-15.0	11/23/2019	421801	<0.0035	**0.00053J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV118-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
B119	5	SV119-5.0	11/23/2019	421801	<0.005	**0.00044J**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	10	SV119-10.0	11/23/2019	421801	<0.004	**0.00092J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV119-15.0	11/23/2019	421801	<0.004	**0.00097J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	25	SV119-25.0	11/23/2019	421801	<0.004	**0.00063J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
B11DDD	5	SV122-5.0	11/23/2019	421801	<0.004	**0.00049J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	10	SV122-10.0	11/23/2019	421801	<0.004	**0.00045J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV122-15.0	11/23/2019	421801	<0.005	**0.00097J**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	25	SV122-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
		SV122-25.0-DUP	11/23/2019	421801	<0.005	**0.00036J**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B120	5	SV120-5.0	11/23/2019	421801	<0.0045	**0.0004J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
		SV120-5.0-DUP	11/23/2019	421801	<0.0045	**0.00041J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
	10	SV120-10.0	11/23/2019	421801	<0.0035	**0.00035J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV120-15.0	11/23/2019	421801	<0.003	**0.00062J**	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
	25	SV120-25.0	11/23/2019	421801	<0.004	**0.00027J**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
B121	5	SV121-5.0	11/23/2019	421801	<0.0055	**0.00031J**	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	10	SV121-10.0	11/23/2019	421801	<0.0035	**0.00049J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV121-15.0	11/23/2019	421801	<0.0035	**0.00064J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV121-25.0	11/23/2019	421801	<0.0045	**0.00019J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045

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Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft)	Field ID	Sample Date	SDG	cis-1,3-dichloropropene	cis-1,4-Dichloro-2-butene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Diisopropyl ether	Ethylbenzene	Ethyl-t-Butyl Ether	Freon 113	Hexachlorobutadiene	Isopropylbenzene	Methyl Ethyl Ketone	Methyl Tertiary Butyl Ether	Naphthalene	n-butylbenzene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019									2.2					1.2				2	2400
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019						0.0074	24	87	57	2200	5.8		6700	1.2	1900	27000	47	3.8	3900
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B117	5	SV117-5.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	**0.0022J**	<0.0035	<0.0035	<0.0035
	10	SV117-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	**0.0023J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	**0.00086J**	<0.0035	<0.0035	<0.0035
	15	SV117-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.07	<0.0035	<0.0035	<0.0035
		SV117-15.0-DUP	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.07	<0.0035	<0.0035	<0.0035
	25	SV117-25.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.07	<0.0035	<0.0035	<0.0035
B118	5	SV118-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	**0.0017J**	<0.0045	<0.0045	<0.0045
	10	SV118-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
	15	SV118-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	**0.00088J**	<0.0035	<0.0035	<0.0035
	25	SV118-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.09	<0.0045	<0.0045	<0.0045
B119	5	SV119-5.0	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0045J**	<0.005	<0.005	<0.005
	10	SV119-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
	15	SV119-15.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
	25	SV119-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**0.0021J**	<0.004	<0.004	<0.004
B11DDD	5	SV122-5.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
	10	SV122-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
	15	SV122-15.0	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	**0.0004J**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0016J**	<0.005	<0.005	<0.005
	25	SV122-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
		SV122-25.0-DUP	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	**0.0021J**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005
B120	5	SV120-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	**0.0051J**	<0.0045	<0.0045	<0.0045
		SV120-5.0-DUP	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	**0.0046J**	<0.0045	<0.0045	<0.0045
	10	SV120-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.07	<0.0035	<0.0035	<0.0035
	15	SV120-15.0	11/23/2019	421801	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.06	<0.003	<0.003	<0.003
	25	SV120-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004
B121	5	SV121-5.0	11/23/2019	421801	<0.0055	<0.0055	<0.0055	<0.0055	**0.0011J**	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**0.0042J**	<0.0055	<0.0055	<0.0055
	10	SV121-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.07	<0.0035	<0.0035	<0.0035
	15	SV121-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.07	<0.0035	<0.0035	<0.0035
	25	SV121-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	**0.0042J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.09	<0.0045	<0.0045	<0.0045

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Summary of Soil Analytical Results for TPH and VOCs
Preliminary Endangerment Assessment – Equivalent Report
Alexander Hamilton High School, Los Angeles, California

					n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-Amyl-Methyl Ether	tert-Butyl alcohol	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019							2200	5600			2200	0.59	1100	130			1200	0.0082
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					3800		7800	6000			7800	24	4900	1600		0.94	23000	0.059
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B117	5	SV117-5.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	10	SV117-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.0004J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV117-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.00014J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
		SV117-15.0-DUP	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.00013J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV117-25.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
B118	5	SV118-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	<0.0045	**0.00018J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
	10	SV118-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV118-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.00019J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV118-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
B119	5	SV119-5.0	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	**0.00021J**	<0.005	<0.005	<0.005	<0.005	<0.005
	10	SV119-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.00033J**	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV119-15.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.00033J**	<0.004	<0.004	<0.004	<0.004	<0.004
	25	SV119-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.00038J**	<0.004	<0.004	<0.004	<0.004	<0.004
B11DDD	5	SV122-5.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.00028J**	<0.004	<0.004	<0.004	<0.004	<0.004
	10	SV122-10.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.0002J**	<0.004	<0.004	<0.004	<0.004	<0.004
	15	SV122-15.0	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	**0.00026J**	<0.005	<0.005	<0.005	<0.005	<0.005
	25	SV122-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
		SV122-25.0-DUP	11/23/2019	421801	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	**0.00038J**	<0.005	<0.005	<0.005	<0.005	<0.005
B120	5	SV120-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	<0.0045	**0.0002J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
		SV120-5.0-DUP	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	<0.0045	**0.00018J**	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
	10	SV120-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.00015J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV120-15.0	11/23/2019	421801	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	**0.00016J**	<0.003	<0.003	<0.003	<0.003	<0.003
	25	SV120-25.0	11/23/2019	421801	<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	**0.00029J**	<0.004	<0.004	<0.004	<0.004	<0.004
B121	5	SV121-5.0	11/23/2019	421801	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.0055	**0.00021J**	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	10	SV121-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.00018J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	15	SV121-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.007	<0.0035	<0.0035	**0.0002J**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
	25	SV121-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045

Notes
mg/kg = milligrams per kilogram
- = not analyzed
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J - estimated value
ft bgs = feet below ground surface
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					Xylene (m & p)	Xylene (o)	Xylene Total
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019							
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019						650	
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg
B117	5	SV117-5.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	10	SV117-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	15	SV117-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
		SV117-15.0-DUP	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	25	SV117-25.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
B118	5	SV118-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045
	10	SV118-10.0	11/23/2019	421801	<0.004	<0.004	<0.004
	15	SV118-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	25	SV118-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045
B119	5	SV119-5.0	11/23/2019	421801	<0.005	<0.005	<0.005
	10	SV119-10.0	11/23/2019	421801	<0.004	<0.004	<0.004
	15	SV119-15.0	11/23/2019	421801	<0.004	<0.004	<0.004
	25	SV119-25.0	11/23/2019	421801	<0.004	<0.004	<0.004
B11DDD	5	SV122-5.0	11/23/2019	421801	<0.004	<0.004	<0.004
	10	SV122-10.0	11/23/2019	421801	<0.004	<0.004	<0.004
	15	SV122-15.0	11/23/2019	421801	<0.005	<0.005	<0.005
	25	SV122-25.0	11/23/2019	421801	<0.004	<0.004	<0.004
		SV122-25.0-DUP	11/23/2019	421801	<0.005	<0.005	<0.005
B120	5	SV120-5.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045
		SV120-5.0-DUP	11/23/2019	421801	<0.0045	<0.0045	<0.0045
	10	SV120-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	15	SV120-15.0	11/23/2019	421801	<0.003	<0.003	<0.003
	25	SV120-25.0	11/23/2019	421801	<0.004	<0.004	<0.004
B121	5	SV121-5.0	11/23/2019	421801	<0.0055	<0.0055	<0.0055
	10	SV121-10.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	15	SV121-15.0	11/23/2019	421801	<0.0035	<0.0035	<0.0035
	25	SV121-25.0	11/23/2019	421801	<0.0045	<0.0045	<0.0045

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						PAH														
					1-Methylnaphthalene	2-methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Phenanthrene
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					9.9	190	3300		17000	1.1	0.11	1.1		11	110	0.028	2400	2300	1.1	
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					18	240	3600		18000	1.1	0.11	1.1		11	110	0.11	2400	2400	1.1	
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04	2.5	B04-2.5	9/19/2018	T182898	<0.024	<0.027	<0.0016	<0.0017	<0.0015	<0.0011	<0.0011	<0.00092	<0.0033	<0.0014	<0.001	<0.002	<0.0013	<0.0014	<0.0016	<0.0015
		B04-2.5 DUP	9/19/2018	T182898	<0.024	<0.027	<0.0016	<0.0017	<0.0015	<0.0011	<0.0011	<0.00092	<0.0033	<0.0014	<0.001	<0.002	<0.0013	<0.0014	<0.0016	<0.0015
	5	B04-5.0	9/19/2018	T182898	<0.024	<0.027	<0.0016	<0.0017	<0.0015	<0.0011	<0.0011	<0.00092	<0.0033	<0.0014	<0.001	<0.002	<0.0013	<0.0014	<0.0016	<0.0015
B57	5	B57-5.0	9/10/2018	T182803	<0.024	<0.027	<0.017	<0.025	<0.02	<0.023	<0.035	<0.045	<0.038	<0.03	<0.032	<0.025	<0.026	<0.024	<0.045	<0.02
	10	B57-10.0	9/10/2018	T182803	<0.024	<0.027	<0.017	<0.025	<0.02	<0.023	<0.035	<0.045	<0.038	<0.03	<0.032	<0.025	<0.026	<0.024	<0.045	<0.02
	15	B57-15.0	9/10/2018	T182803	<0.024	<0.027	<0.017	<0.025	<0.02	<0.023	<0.035	<0.045	<0.038	<0.03	<0.032	<0.025	<0.026	<0.024	<0.045	<0.02

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Location	Sample Depth (ft)	Field ID	Sample Date	SDG	Pyrene	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,4-Dinitrotoluene	2,6-dinitrotoluene	2-chloronaphthalene	2-chlorophenol	2-methylphenol	2-nitroaniline	2-nitrophenol	3-nitroaniline	4,6-Dinitro-2-methylphenol	4-bromophenyl phenyl ether	4-chloro-3-methylphenol	4-chloroaniline	4-chlorophenyl phenyl ether
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					1800	6300	7.8	190	1300	130	1.7	0.36	4100	340	3200	630			5.1		6300	2.7	
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					1800	6300	49	190	1300	130	1.7	0.36	4800	390	3200	630			5.1		6300	2.7	
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04	2.5	B04-2.5	9/19/2018	T182898	<0.0012	<0.02	<0.024	<0.095	<0.027	<0.019	<0.02	<0.026	<0.025	<0.018	<0.044	<0.015	<0.033	<0.027	<0.039	<0.021	<0.029	<0.051	<0.018
		B04-2.5 DUP	9/19/2018	T182898	<0.0012	<0.02	<0.024	<0.095	<0.027	<0.019	<0.02	<0.026	<0.025	<0.018	<0.044	<0.015	<0.033	<0.027	<0.039	<0.021	<0.029	<0.051	<0.018
	5	B04-5.0	9/19/2018	T182898	<0.0012	<0.02	<0.024	<0.095	<0.027	<0.019	<0.02	<0.026	<0.025	<0.018	<0.044	<0.015	<0.033	<0.027	<0.039	<0.021	<0.029	<0.051	<0.018
B57	5	B57-5.0	9/10/2018	T182803	<0.023	<0.02	<0.024	<0.095	<0.027	<0.019	<0.02	<0.026	<0.025	<0.018	<0.044	<0.015	<0.033	<0.027	<0.039	<0.021	<0.029	<0.051	<0.018
	10	B57-10.0	9/10/2018	T182803	<0.023	<0.02	<0.024	<0.095	<0.027	<0.019	<0.02	<0.026	<0.025	<0.018	<0.044	<0.015	<0.033	<0.027	<0.039	<0.021	<0.029	<0.051	<0.018
	15	B57-15.0	9/10/2018	T182803	<0.023	<0.02	<0.024	<0.095	<0.027	<0.019	<0.02	<0.026	<0.025	<0.018	<0.044	<0.015	<0.033	<0.027	<0.039	<0.021	<0.029	<0.051	<0.018

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					SVOCs																		
					4-methylphenol	4-nitroaniline	4-nitrophenol	Azobenzene	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					6300	27			6300	190	0.1	2000	39	290		66	51000		6300	630	0.19		
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					6300	27		5.6	6300	190	0.23	3100	39	290		73	51000		6300	630	0.21	1.8	1.8
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04	2.5	B04-2.5	9/19/2018	T182898	<0.018	<0.022	<0.047	<0.025	<0.025	<0.026	<0.023	<0.013	<0.021	<0.027	<0.017	<0.023	<0.019	<0.02	<0.02	<0.033	<0.024	<0.048	<0.012
		B04-2.5 DUP	9/19/2018	T182898	<0.018	<0.022	<0.047	<0.025	<0.025	<0.026	<0.023	<0.013	<0.021	<0.027	<0.017	<0.023	<0.019	<0.02	<0.02	<0.033	<0.024	<0.048	<0.012
	5	B04-5.0	9/19/2018	T182898	<0.018	<0.022	<0.047	<0.025	<0.025	<0.026	<0.023	<0.013	<0.021	<0.027	<0.017	<0.023	<0.019	<0.02	<0.02	<0.033	<0.024	<0.048	<0.012
B57	5	B57-5.0	9/10/2018	T182803	<0.018	<0.022	<0.047	<0.025	<0.025	<0.026	<0.023	<0.013	<0.021	<0.027	<0.017	<0.023	<0.019	<0.02	<0.02	<0.033	<0.024	<0.048	<0.012
	10	B57-10.0	9/10/2018	T182803	<0.018	<0.022	<0.047	<0.025	<0.025	<0.026	<0.023	<0.013	<0.021	<0.027	<0.017	<0.023	<0.019	<0.02	<0.02	<0.033	<0.024	<0.048	<0.012
	15	B57-15.0	9/10/2018	T182803	<0.018	<0.022	<0.047	<0.025	<0.025	<0.026	<0.023	<0.013	<0.021	<0.027	<0.017	<0.023	<0.019	<0.02	<0.02	<0.033	<0.024	<0.048	<0.012

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					Isophorone	Nitrobenzene	N-Nitrosodimethylamine	N-nitrosodi-n-propylamine	n-Nitrosodiphenylamine	Pentachlorophenol	Phenol
HHRA Note 3 Residential Soil DTSC - Most Stringent April 2019					570			0.078	110	1	19000
USEPA Residential Soil - Most Stringent (TR=1E-06, HQ=1.0) May 2019					570	5.1	0.002	0.078	110	1	19000
Location	**Sample Depth (ft)**	**Field ID**	**Sample Date**	**SDG**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B04	2.5	B04-2.5	9/19/2018	T182898	<0.017	<0.027	<0.022	<0.023	<0.022	<0.028	<0.024
		B04-2.5 DUP	9/19/2018	T182898	<0.017	<0.027	<0.022	<0.023	<0.022	<0.028	<0.024
	5	B04-5.0	9/19/2018	T182898	<0.017	<0.027	<0.022	<0.023	<0.022	<0.028	<0.024
B57	5	B57-5.0	9/10/2018	T182803	<0.017	<0.027	<0.022	<0.023	<0.022	<0.028	<0.024
	10	B57-10.0	9/10/2018	T182803	<0.017	<0.027	<0.022	<0.023	<0.022	<0.028	<0.024
	15	B57-15.0	9/10/2018	T182803	<0.017	<0.027	<0.022	<0.023	<0.022	<0.028	<0.024

Notes
mg/kg = milligrams per kilogram
- = not analyzed
< = not reported above analytical reporting limit shown
ft bgs = feet below ground surface
HHRA- Human Health Risk Assessment
DTSC - Department of Toxic Substance Control
USEPA- Usited State Environmental Protection Agency

Table 6
Leaching Analyses Results
Preliminary Endangerment Assessment - Equivalent Report
Alexander Hamilton Senior High School, Los Angeles, California

				Metals		Leaching			
				Arsenic	Lead	Arsenic (WET)	Arsenic (TCLP)	Lead (WET)	Lead (TCLP)
				mg/kg	mg/kg	mg/L	mg/L	mg/L	mg/L
Location	**Field_ID**	**Sample Depth (ft bgs)**	**Sampled Date**	**500**	**1000**	**5**	**5**	**5**	**5**
B03	B03-1.5	1.5	9/10/2018	17	300	-	-	3.6	-
B10	B10-0.5	0.5	9/10/2018	18	90	-	-	3.3	-
B11DDD	B11-DDD-1.5	1.5	11/23/2019	54.6	-	1.74	0.19	-	-
B12	B12-0.5	0.5	10/20/2018	5.3	270	-	-	**27**	-
B12BBB	B12-BBB-0.5	0.5-0.5	11/23/2019	-	**1030**	-	-	**83**	**5.09**
	B12-BBB-0.5-DUP	0.5-0.5	11/23/2019	-	32	-	-	-	-
B18	B18-2.5	2.5	9/19/2018	63	14	0.38	-	-	-
B25	B25-0.5	0.5	10/20/2018	8	130	-	-	4.6	-
B91	B91-1.5	1.5	10/20/2018	14	90	-	-	<0.1	-

Notes
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
- = not analyzed
< = not reported above analytical reporting limit shown
ft bgs = feet below ground surface

Table 7

Soil Vapor Detections

Preliminary Endangerment Assessment - Equivalent Report

LAUSD Alexander Hamilton High School, Los Angeles, California

					MAH	Other			TPH	VOCs														
					1-methyl-4 ethyl benzene	1,1-Difluoroethane	1,1-Dibromoethane	Propene	TPH as Gasoline	1,2-Dichlorotetrafluoroet	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2,4-trichlorobenzene	1,2,4-trimethylbenzene	1,2-dibromo-3-chloroprop	1,2-dibromoethane
HHRA Note 3 Res Air DTSC-SLs April 2019											190	500000	24		900	36500		1650	0.07	195			2.35
USEPA Res Air RSLs (TR=1E-06, HQ=1.0) April 2019, Attenuation Factor = 0.002						21000000		1550000			190	2600000	24	90	900	105000			155	1050	31500	0.085	2.35
Location	Sample Depth (ft bgs)	Field ID	Sample Date	SDG	µg/m3	µg/m3	ug/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
SV01	5	SV01-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	15	<8	<8
	15	SV01-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	12	<8	<8
	15	SV01-15.0' REP	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	12	<8	<8
SV02	5	SV02-5.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	14	<8	<8
	15	SV02-15.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	8	<8	<8
SV04	5	B4-5'	9/19/2018	F-0180	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	17	<8	<8
SV04A	5	SV04A-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	15.5	SV04A-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
SV04B	5	SV04B-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	5	SV04B-5.0 REP	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	15.5	SV04B-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
SV04C	5	SV04C-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	11	<8	<8
	15.5	SV04C-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	26	<8	<8
SV04D	5	SV04D-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	15.5	SV04D-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	9	<8	<8
	15.5	SV04D-15.5	6/14/2019	ST-13880	16.1	-	-	3.3	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	16.9	<1	<1
SV05	5	SV05-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV05-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
SV22	5	SV22-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	8	<8	<8
	15	SV22-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
SV23	5	SV23-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV23-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
SV24	5	SV24-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV24-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
SV53	5	SV53-5.0'	9/1/2018	ST-12616	3.4	-	-	<1	-	<1	<1	<1	-	<1	<1	<1	-	-	-	<1	5.1	-	<1
	5	SV53-5.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	10	<8	<8
	15	SV53-15.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	10	<8	<8
SV54	5	SV54-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	16	<8	<8
	15.5	SV54-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
SV55	5	SV55-5.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	-	<8	<10	<16	<8	<16	<8	-	-
	15	SV55-15.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	755	<8	<8
SV56	5	SV56-5.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	15	SV56-15.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	418	<8	<8
SV57	5	SV57-5.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	12	<8	<8
	15	SV57-15.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	12	<8	<8
SV58	5	SV58-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV58-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
SV59	5	SV59-5.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV59-15.0'	8/31/2018	F-0170	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV59-15.0'	8/31/2018	ST-12571	<2	-	-	33.8	-	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	2.7	<2	<2
SV60	5	SV60-5.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	15	SV60-15.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	15	<8	<8
	15	SV60-15.0'	11/21/2018	ST-13007	4.49	-	-	700	-	<4	-	<3	<4	9.81	<2	<2	-	-	-	<3	19	-	<5
SV61	5	SV61-5.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	10	<8	<8
	15	SV61-15.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	8	<8	<8
SV62	5	SV62-5.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	5	SV62-5.0 REP	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
	15	SV62-15.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
SV64	19	B64-19'	9/19/2018	F-0180	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	9	<8	8	8	<8	<8
	20	SV64-20.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	144	<8	<8
	29	B64-29'	9/19/2018	F-0180	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	29	B64-29'	9/19/2018	ST-12676	6	-	-	<2	-	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	8.3	<2	<2
	29	B64-29' REP	9/19/2018	F-0180	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	30	SV64-30.0	11/21/2018	D-1552	-	-	-	-	<80	-	<8	<8	<8	<8	<8	<8	<10	<16	<8	<16	228	<8	<8
SV65	5	SV65-5.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	14	<8	<8
	15	SV65-15.0'	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
	15	SV65-15.0' REP	9/10/2018	F-0173	-	-	-	-	-	-	<8	<8	<8	<8	<8	<8	<8	<16	<8	<16	<8	<8	<8
SV110	5	SV110-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	29	<8	<8
	15.5	SV110-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	174	<8	<8
	15.5	SV110-15.5 REP	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	171	<8	<8
SV111	5	SV111-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	23	<8	<8
	5	SV111-5.0	6/14/2019	ST-13880	12.4	-	-	142	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	20.5	<1	<1
	15.5	SV111-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	18	<8	<8
SV112	5	SV112-5.0	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	14	<8	<8
	15.5	SV112-15.5	6/14/2019	D-1648	-	-	-	-	-	-	<8	<8	<16	<8	<8	<8	<10	<16	<8	<16	<8	<8	<8
SV113	5	SV113-5.0	8/14/2019	ST-14158	17.8	-	-	3.7	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	55	<1	<1
	15	SV113-15.0	8/14/2019	ST-14158	<1	-	-	2.5	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	2.9	<1	<1
SV114	5	SV114-5.0	8/14/2019	ST-14158	4.3	-	-	3.6	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	27.3	<1	<1
	15	SV114-15.0	8/14/2019	ST-14158	3.3	-	-	6.4	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	12.5	<1	<1
SV115	5	SV115-5.0	8/14/2019	ST-14158	21.7	-	-	7.6	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	77.3	<1	<1
	15	SV115-15.0	8/14/2019	ST-14158	2.6	-	-	9.8	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	11.4	<1	<1
SV116	5	SV116-5.0	8/14/2019	ST-14158	4.3	-	-	2.4	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	19.1	<1	<1
	15	SV116-15.0	8/14/2019	ST-14158	2.7	-	-	5.9	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	13.2	<1	<1
	15	SV116-15.0 REP	8/14/2019	ST-14158	1.9	-	-	9.3	-	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	6.8	<1	<1
SV117	5	SV117-5	11/25/2019	E911113	170	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	570	-	-
	10	SV117-10	11/25/2019	E911113	340	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	1300	-	-
	15	SV117-15	11/25/2019	E911113	500	<11	<16	-	-	<14	<14	<11	<14	<11	<8.2	<8	-	-	-	<75	1800	-	-
	25	SV117-25	11/25/2019	E911113	510	<11	<16	-	-	<14	<14	<11	<14	<11	<8.2	<8	-	-	-	<75	1800	-	-
SV118	5	SV118-5	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5	-	-
	5	SV118-5-Rep	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	5.3	-	-
	10	SV118-10	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	8.5	-	-
	15	SV118-15	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	9	-	-
	25	SV118-25	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5J	-	-
	25	SV118-25-Rep	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	7	-	-
SV119	5	SV119-5	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5	-	-
	10	SV119-10	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	5.4	-	-
	15	SV119-15	11/25/2019	E911113	<5J	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	11	-	-
	25	SV119-25	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5J	-	-
SV120	5	SV120-5	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5	-	-
	10	SV120-10	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	7.8	-	-
	15	SV120-15	11/25/2019	E911113	12	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	49	-	-
	25	SV120-25	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	8.8	-	-
SV121	5	SV121-5	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5	-	-
	10	SV121-10	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	5.3	-	-
	15	SV121-15	11/25/2019	E911113	<5J	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	18	-	-
	25	SV121-25	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5J	-	-
SV122	5	SV122-5	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	6.1	-	-
	5	SV122-5-Rep	11/25/2019	E911115	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	6.3	-	-
	10	SV122-10	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	7.6	-	-
	15	SV122-15	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38J	<5J	-	-
	25	SV122-25	11/25/2019	E911113	<5	<5.5	<7.8	-	-	<7.1	<7	<5.5	<7	<5.5	<4.1	<4	-	-	-	<38	<5J	-	-

Notes

µg/m3 = micrograms per meter cubed

< = less than analytical reporting limit shown

J = estimated value

Table 7

Soil Vapor Detections

Preliminary Endangerment Assessment - Equivalent Report

LAUSD Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft bgs)	Field ID	Sample Date	SDG	1,2-dichlorobenzene	1,2-dichloroethane	1,3-Butadiene	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	Acrolein	1,3-dichloropropane	1,4-dichlorobenzene	1,4-Dioxane	2,2-dichloropropane	2-chlorotoluene	2-hexanone	2-Propanol	4-chlorotoluene	4-Methyl-2-pentanone	Acetone	Benzene	Benzyl chloride
HHRA Note 3 Res Air DTSC-SLs April 2019							8.5	140				41500		180		41500			41500			48.5	
USEPA Res Air RSLs (TR=1E-06, HQ=1.0) April 2019, Attenuation Factor = 0.002					105000	55	47	380	31500		10.5		130	280			15500	105000		1550000	16000000	180	28.5
					µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	ug/m3	µg/m3	ug/m3
SV01	5	SV01-5.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV01-15.0'	8/31/2018	F-0170	<12	<8	-	<8	9	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV01-15.0' REP	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
SV02	5	SV02-5.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	9	-	<8	<8	-	-	<8	-	-	16	-
	15	SV02-15.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
SV04	5	B4-5'	9/19/2018	F-0180	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	9	-
SV04A	5	SV04A-5.0	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV04A-15.5	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
SV04B	5	SV04B-5.0	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	5	SV04B-5.0 REP	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV04B-15.5	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
SV04C	5	SV04C-5.0	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV04C-15.5	6/14/2019	D-1648	<16	<8	-	<8	16	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
SV04D	5	SV04D-5.0	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV04D-15.5	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV04D-15.5	6/14/2019	ST-13880	<1	<1	<1	-	18.4	<1	1.4	-	<1	<1	-	-	<1	<10	-	4.5	19.4	6.5	<1
SV05	5	SV05-5.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV05-15.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
SV22	5	SV22-5.0'	8/31/2018	F-0170	<12	<8	-	<8	8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV22-15.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
SV23	5	SV23-5.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV23-15.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
SV24	5	SV24-5.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV24-15.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
SV53	5	SV53-5.0'	9/1/2018	ST-12616	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	-	<1	2.9	-	4.7	48.5	3.9	<1
	5	SV53-5.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV53-15.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	15	-
SV54	5	SV54-5.0	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV54-15.5	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
SV55	5	SV55-5.0	11/21/2018	D-1552	-	-	-	<8	<8	-	-	<8	-	-	<8	-	-	-	-	-	-	-	-
	15	SV55-15.0	11/21/2018	D-1552	<10	<8	-	<8	299	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	1080	-
SV56	5	SV56-5.0	11/21/2018	D-1552	<10	<8	-	<8	<8	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	<8	-
	15	SV56-15.0	11/21/2018	D-1552	<10	<8	-	<8	139	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	296	-
SV57	5	SV57-5.0'	9/10/2018	F-0173	<8	<8	-	<8	9	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV57-15.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	17	-
SV58	5	SV58-5.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV58-15.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
SV59	5	SV59-5.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV59-15.0'	8/31/2018	F-0170	<12	<8	-	<8	<8	<12	-	<8	<12	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV59-15.0'	8/31/2018	ST-12571	<2	<2	<2	-	<2	<2	<2	-	<2	<2	-	-	<2	<2	-	4.7	28.1	6.4	<2
SV60	5	SV60-5.0	11/21/2018	D-1552	<10	<8	-	<8	<8	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	<8	-
	15	SV60-15.0	11/21/2018	D-1552	<10	<8	-	<8	12	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	26	-
	15	SV60-15.0'	11/21/2018	ST-13007	<4	<2	16.9	<3	54.2	<4	8.24	-	<4	<2	-	-	4.84	10.5	-	24	93.6	24.8	<3
SV61	5	SV61-5.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
	15	SV61-15.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
SV62	5	SV62-5.0	11/21/2018	D-1552	<10	<8	-	<8	<8	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	<8	-
	5	SV62-5.0 REP	11/21/2018	D-1552	<10	<8	-	<8	<8	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	<8	-
	15	SV62-15.0	11/21/2018	D-1552	<10	76	-	<8	<8	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	17	-
SV64	19	B64-19'	9/19/2018	F-0180	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
	20	SV64-20.0	11/21/2018	D-1552	<10	<8	-	<8	139	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	19	-
	29	B64-29'	9/19/2018	F-0180	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
	29	B64-29'	9/19/2018	ST-12676	<2	<2	<2	-	3.3	<2	<2	-	<2	<2	-	-	3.7	3.9	-	4.7	47	3.1	<2
	29	B64-29' REP	9/19/2018	F-0180	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	<8	-
	30	SV64-30.0	11/21/2018	D-1552	<10	<8	-	<8	112	<10	-	<8	<10	-	<8	<10	-	-	<10	-	-	<8	-
SV65	5	SV65-5.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	12	-
	15	SV65-15.0'	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	8	-
	15	SV65-15.0' REP	9/10/2018	F-0173	<8	<8	-	<8	<8	<8	-	<8	<8	-	<8	<8	-	-	<8	-	-	8	-
SV110	5	SV110-5.0	6/14/2019	D-1648	<16	<8	-	<8	12	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
	15.5	SV110-15.5	6/14/2019	D-1648	<16	<8	-	<8	67	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	240	-
	15.5	SV110-15.5 REP	6/14/2019	D-1648	<16	<8	-	<8	65	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	232	-
SV111	5	SV111-5.0	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	18	-
	5	SV111-5.0	6/14/2019	ST-13880	<1	<1	<1	-	<1	<1	<1	-	<1	<1	-	-	<1	<10	-	<1	23.8	14.5	<1
	15.5	SV111-15.5	6/14/2019	D-1648	<16	<8	-	<8	9	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	<8	-
SV112	5	SV112-5.0	6/14/2019	D-1648	<16	<8	-	<8	13	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	54	-
	15.5	SV112-15.5	6/14/2019	D-1648	<16	<8	-	<8	<8	<16	-	<8	<16	-	<16	<12	-	-	<12	-	-	17	-
SV113	5	SV113-5.0	8/14/2019	ST-14158	<1	<1	<1	-	18.1	<1	2.8	-	<1	<1	-	-	3.9	<1	-	<1	108	6.4	<1
	15	SV113-15.0	8/14/2019	ST-14158	<1	<1	<1	-	<1	<1	2.6	-	<1	<1	-	-	1.2	<1	-	1.1	73.3	<1	<1
SV114	5	SV114-5.0	8/14/2019	ST-14158	<1	<1	<1	-	11	<1	4.8	-	<1	<1	-	-	2.5	<1	-	5	66.9	2.3	<1
	15	SV114-15.0	8/14/2019	ST-14158	<1	<1	<1	-	4.6	<1	2.8	-	<1	<1	-	-	2.9	1.4	-	1.8	20.9	1.8	<1
SV115	5	SV115-5.0	8/14/2019	ST-14158	<1	<1	<1	-	34.6	<1	3.8	-	<1	<1	-	-	6.8	<1	-	3.9	36.9	11.2	<1
	15	SV115-15.0	8/14/2019	ST-14158	<1	<1	<1	-	3.8	<1	2.2	-	<1	<1	-	-	3.2	<1	-	2.1	29.4	2.2	<1
SV116	5	SV116-5.0	8/14/2019	ST-14158	<1	<1	<1	-	7.8	<1	<1	-	<1	<1	-	-	2	2.8	-	3.9	65.2	2.7	<1
	15	SV116-15.0	8/14/2019	ST-14158	<1	<1	<1	-	<1	<1	2	-	<1	<1	-	-	1.3	3	-	1.6	137	2	<1
	15	SV116-15.0 REP	8/14/2019	ST-14158	<1	<1	<1	-	2.3	<1	2.4	-	<1	<1	-	-	<1	<1	-	1.8	34.5	2.1	<1
SV117	5	SV117-5	11/25/2019	E911113	<12	<4.1	-	<9.4	200	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	49	-
	10	SV117-10	11/25/2019	E911113	<12	<4.1	-	<9.4	370	<12	-	-	<12	-	-	-	<8.3	-	-	16	-	75	-
	15	SV117-15	11/25/2019	E911113	<24	<8.2	-	<19	580	<24	-	-	<24	-	-	-	<17	-	-	<17J	-	130	-
	25	SV117-25	11/25/2019	E911113	<24	<8.2	-	<19	630	<24	-	-	<24	-	-	-	<17	-	-	<17J	-	160	-
SV118	5	SV118-5	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
	5	SV118-5-Rep	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
	10	SV118-10	11/25/2019	E911113	<12	<4.1	-	<9.4	<5J	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2J	-
	15	SV118-15	11/25/2019	E911113	<12	<4.1	-	<9.4	<5J	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	<3.2J	-
	25	SV118-25	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	<3.2J	-
	25	SV118-25-Rep	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	<3.2J	-
SV119	5	SV119-5	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
	10	SV119-10	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	<3.2J	-
	15	SV119-15	11/25/2019	E911113	<12	<4.1	-	<9.4	<5J	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	13	-
	25	SV119-25	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
SV120	5	SV120-5	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
	10	SV120-10	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	3.5	-
	15	SV120-15	11/25/2019	E911113	<12	<4.1	-	<9.4	14	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	8.3	-
	25	SV120-25	11/25/2019	E911113	<12	<4.1	-	<9.4	<5J	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2J	-
SV121	5	SV121-5	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	380	-
	10	SV121-10	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3J	-	120	-
	15	SV121-15	11/25/2019	E911113	<12	<4.1	-	<9.4	5.9	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	38	-
	25	SV121-25	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2J	-
SV122	5	SV122-5	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
	5	SV122-5-Rep	11/25/2019	E911115	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2	-
	10	SV122-10	11/25/2019	E911113	<12	<4.1	-	<9.4	<5J	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	12	-
	15	SV122-15	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	<3.2J	-
	25	SV122-25	11/25/2019	E911113	<12	<4.1	-	<9.4	<5	<12	-	-	<12	-	-	-	<8.3	-	-	<8.3	-	3.4	-

Notes

µg/m3 = micrograms per meter cubed

< = less than analytical reporting limit shown

J = estimated value

Table 7

Soil Vapor Detections

Preliminary Endangerment Assessment - Equivalent Report

LAUSD Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft bgs)	Field ID	Sample Date	SDG	Bromobenzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Cyclohexane	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Diisopropyl ether	Ethanol
HHRA Note 3 Res Air DTSC-SLs April 2019						38	1300			33.5		65				4150					500		
USEPA Res Air RSLs (TR=1E-06, HQ=1.0) April 2019, Attenuation Factor = 0.002					31500	38	1300	2600	365000	235	26000		5000000	60	47000			3150000	2100	50000	50000	365000	
					µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	ug/m3	µg/m3	µg/m3	µg/m3	ug/m3	µg/m3
SV01	5	SV01-5.0'	8/31/2018	F-0170	<8	9	<8	-	-	<8	<8	12	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV01-15.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV01-15.0' REP	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV02	5	SV02-5.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV02-15.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV04	5	B4-5'	9/19/2018	F-0180	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV04A	5	SV04A-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV04A-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV04B	5	SV04B-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	5	SV04B-5.0 REP	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV04B-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV04C	5	SV04C-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV04C-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV04D	5	SV04D-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV04D-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV04D-15.5	6/14/2019	ST-13880	-	<1	<1	-	41.9	<1	<1	<1	-	<1	-	<1	-	1.5	-	<2.4	<1	<1	-
SV05	5	SV05-5.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV05-15.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV22	5	SV22-5.0'	8/31/2018	F-0170	<8	8	<8	-	-	<8	<8	12	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV22-15.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV23	5	SV23-5.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	12	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV23-15.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV24	5	SV24-5.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	10	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV24-15.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV53	5	SV53-5.0'	9/1/2018	ST-12616	-	2.4	2.4	<1	3.4	<1	<1	2.5	-	2.5	<1	<1	<1	<1	-	<1	<1	-	16.7
	5	SV53-5.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV53-15.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	8	<8	<40	-
SV54	5	SV54-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV54-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV55	5	SV55-5.0	11/21/2018	D-1552	-	-	-	-	-	-	-	-	-	-	-	<8	<8	-	-	-	<8	<40	-
	15	SV55-15.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV56	5	SV56-5.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV56-15.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV57	5	SV57-5.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV57-15.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV58	5	SV58-5.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	15	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV58-15.0'	8/31/2018	F-0170	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV59	5	SV59-5.0'	8/31/2018	F-0170	<8	19	14	-	-	<8	<8	27	-	9	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV59-15.0'	8/31/2018	F-0170	<8	13	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV59-15.0'	8/31/2018	ST-12571	-	<2	<2	-	3	<2	<2	<2	<2	<2	<2	<2	-	<2	-	<2	<2	<2	<2
SV60	5	SV60-5.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV60-15.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV60-15.0'	11/21/2018	ST-13007	-	<4	<6	<2	7.54	<3	<3	<5	-	<2	-	<2	<3	21.5	-	3.28	2.91	-	176
SV61	5	SV61-5.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV61-15.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV62	5	SV62-5.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	5	SV62-5.0 REP	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV62-15.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV64	19	B64-19'	9/19/2018	F-0180	<8	<8	<8	-	-	<8	<8	11	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	20	SV64-20.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	29	B64-29'	9/19/2018	F-0180	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	29	B64-29'	9/19/2018	ST-12676	-	4.6	2.4	-	<3	<2	<2	<2	<2	10.7	<2	<2	-	<2	-	2.5	<2	-	150
	29	B64-29' REP	9/19/2018	F-0180	<8	<8	<8	-	-	<8	<8	<8	-	10	-	<8	<8	-	<8	<8	<8	<40	-
	30	SV64-30.0	11/21/2018	D-1552	<8	<8	<8	-	-	<8	<8	<8	-	13	-	<8	<8	-	<8	<8	<8	<40	-
SV65	5	SV65-5.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	11	-	10	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV65-15.0'	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15	SV65-15.0' REP	9/10/2018	F-0173	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV110	5	SV110-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV110-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV110-15.5 REP	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV111	5	SV111-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	5	SV111-5.0	6/14/2019	ST-13880	-	<1	<1	-	13.9	<1	<1	<1	-	1.5	-	<1	-	2.4	-	1.7	<1	<1	-
	15.5	SV111-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV112	5	SV112-5.0	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
	15.5	SV112-15.5	6/14/2019	D-1648	<8	<8	<8	-	-	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<40	-
SV113	5	SV113-5.0	8/14/2019	ST-14158	-	12	8.5	-	7	<1	<1	16.6	-	6.2	-	<1	-	<1	-	2.3	1.8	<1	-
	15	SV113-15.0	8/14/2019	ST-14158	-	<1	<1	-	2.3	<1	<1	<1	-	<1	-	<1	-	<1	-	2.5	3	<1	-
SV114	5	SV114-5.0	8/14/2019	ST-14158	-	5.2	5.8	-	4.1	<1	<1	7.9	-	3.6	-	<1	-	<1	-	2.4	2.5	<1	-
	15	SV114-15.0	8/14/2019	ST-14158	-	<1	<1	-	6.6	<1	<1	<1	-	<1	-	<1	-	<1	-	2.2	<1	<1	-
SV115	5	SV115-5.0	8/14/2019	ST-14158	-	13.1	5.2	-	10.1	<1	<1	14.3	-	8.8	-	<1	-	3.4	-	2.7	1.3	<1	-
	15	SV115-15.0	8/14/2019	ST-14158	-	<1	<1	-	5.4	<1	<1	<1	-	<1	-	<1	-	1	-	2.6	1.6	<1	-
SV116	5	SV116-5.0	8/14/2019	ST-14158	-	4.4	4.6	-	2.3	<1	<1	7.1	-	2.1	-	<1	-	<1	-	2.4	2.6	<1	-
	15	SV116-15.0	8/14/2019	ST-14158	-	<1	<1	-	4.9	<1	<1	<1	-	<1	-	<1	-	1.1	-	2.5	3.9	<1	-
	15	SV116-15.0 REP	8/14/2019	ST-14158	-	<1	<1	-	6.8	<1	<1	<1	-	<1	-	<1	-	<1	-	2.6	1	<1	-
SV117	5	SV117-5	11/25/2019	E911113	-	<6.8	<10	<16	6.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1J	<4	<4.6	-	-	<5J	10B B	-	-
	10	SV117-10	11/25/2019	E911113	-	<6.8	<10	<16	9.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	9.8B B	-	-
	15	SV117-15	11/25/2019	E911113	-	<14	<21	<32	<13J	<13	<9.4	<17	<16	<9.9	<4.1	<8	<9.2	-	-	<10	19B B	-	-
	25	SV117-25	11/25/2019	E911113	-	<14	<21	<32	25	<13	<9.4	<17	<16	<9.9	<4.1	<8	<9.2	-	-	<10	20B B	-	-
SV118	5	SV118-5	11/25/2019	E911115	-	<6.8	<10	<16	<6.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	5	SV118-5-Rep	11/25/2019	E911115	-	<6.8	<10	<16	<6.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	10	SV118-10	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	10B B	-	-
	15	SV118-15	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	9.9B B	-	-
	25	SV118-25	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	9.5	<2.1	<4	<4.6	-	-	<5J	11B B	-	-
	25	SV118-25-Rep	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	9.5	<2.1	<4	<4.6	-	-	<5J	11B B	-	-
SV119	5	SV119-5	11/25/2019	E911115	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	10	SV119-10	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	9.2B B	-	-
	15	SV119-15	11/25/2019	E911113	-	<6.8	<10	<16	18	<6.4	<4.7	<8.6	<8	<4.9J	5.2	<4	<4.6	-	-	<5J	11B B	-	-
	25	SV119-25	11/25/2019	E911113	-	<6.8	<10	<16	<6.3	<6.4	<4.7	<8.6	<8	9.1	<2.1	<4	<4.6	-	-	<5J	9.9B B	-	-
SV120	5	SV120-5	11/25/2019	E911115	-	<6.8	<10	<16	<6.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	10	SV120-10	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	5.2	<2.1	<4	<4.6	-	-	<5J	9.9B B	-	-
	15	SV120-15	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9J	<2.1	<4	<4.6	-	-	<5J	10B B	-	-
	25	SV120-25	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	10B B	-	-
SV121	5	SV121-5	11/25/2019	E911115	-	<6.8	<10	<16	13	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	10	SV121-10	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	9.4B B	-	-
	15	SV121-15	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	10B B	-	-
	25	SV121-25	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	10B B	-	-
SV122	5	SV122-5	11/25/2019	E911115	-	<6.8	<10	<16	<6.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	5	SV122-5-Rep	11/25/2019	E911115	-	<6.8	<10	<16	<6.3	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5	<3.5	-	-
	10	SV122-10	11/25/2019	E911113	-	<6.8	<10	<16	23	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	11B B	-	-
	15	SV122-15	11/25/2019	E911113	-	<6.8	<10	<16	7.6	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	11B B	-	-
	25	SV122-25	11/25/2019	E911113	-	<6.8	<10	<16	<6.3J	<6.4	<4.7	<8.6	<8	<4.9	<2.1	<4	<4.6	-	-	<5J	10B B	-	-

Notes

µg/m3 = micrograms per meter cubed

< = less than analytical reporting limit shown

J = estimated value

Table 7

Soil Vapor Detections

Preliminary Endangerment Assessment - Equivalent Report

LAUSD Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft bgs)	Field ID	Sample Date	SDG	Ethyl acetate	Ethylbenzene	Ethyl-t-Butyl Ether	Freon 113	Heptane	Hexachlorobutadiene	Hexane	Isopropylbenzene	Methyl Ethyl Ketone	Methyl Tertiary Butyl Eth	Naphthalene	n-butylbenzene	n-propylbenzene	Methyl Methacrylate	Pentane	p-isopropyltoluene	sec-butylbenzene	Styrene
HHRA Note 3 Res Air DTSC-SLs April 2019										65						105000					210000	470000
USEPA Res Air RSLs (TR=1E-06, HQ=1.0) April 2019, Attenuation Factor = 0.002					36500	550		2600000	210000	65	365000	210000	2600000	5500	41.5		500000	365000	500000			500000
					µg/m3	µg/m3	ug/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	ug/m3	µg/m3	µg/m3	µg/m3	ug/m3	µg/m3	µg/m3	µg/m3	µg/m3
SV01	5	SV01-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	**16**	-	<40	<40	<12	<8	-	<400	**65**	<12	<8
	15	SV01-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	**28**	<12	<8
	15	SV01-15.0' REP	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	**28**	<12	<8
SV02	5	SV02-5.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	**13**	-	<40	<40	**9**	<8	-	<400	**16**	**10**	**9**
	15	SV02-15.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	**9**	<8	-	<400	**9**	<8	<8
SV04	5	B4-5'	9/19/2018	F-0180	-	**8.54**	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	<8	<8	<8
SV04A	5	SV04A-5.0	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV04A-15.5	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
SV04B	5	SV04B-5.0	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	5	SV04B-5.0 REP	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV04B-15.5	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
SV04C	5	SV04C-5.0	6/14/2019	D-1648	-	**12**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV04C-15.5	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	**27**	<12	<8
SV04D	5	SV04D-5.0	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV04D-15.5	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV04D-15.5	6/14/2019	ST-13880	5.6	**6.3**	<1	<1	<10	<1	<10	**2.5**	**16.5**	<1	<5	**2.1**	**2.2**	<1	<10	**2.3**	<1	**1.2**
SV05	5	SV05-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	**21**	-	<40	<40	<12	<8	-	<400	**15**	<12	<8
	15	SV05-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	<8	<12	<8
SV22	5	SV22-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	**21**	-	<40	<40	<12	<8	-	<400	**14**	<12	<8
	15	SV22-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	**8**	<12	<8
SV23	5	SV23-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	**10**	<12	<8
	15	SV23-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	<8	<12	<8
SV24	5	SV24-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	<8	<12	<8
	15	SV24-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	<8	<12	<8
SV53	5	SV53-5.0'	9/1/2018	ST-12616	3.4	**2.7**	-	<1	<50	<1	<50	<1	<1	<1	<1	-	<1	<1	<50	<1	-	<1
	5	SV53-5.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	<8	<8	<8
	15	SV53-15.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	<8	<8	<8
SV54	5	SV54-5.0	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	**21**	<12	<8
	15.5	SV54-15.5	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
SV55	5	SV55-5.0	11/21/2018	D-1552	-	<8	<40	<16	<80	<16	<80	<8	-	<40	<40	-	<8	-	<80	<10	-	<8
	15	SV55-15.0	11/21/2018	D-1552	-	**1000**	<40	<16	<80	<16	<80	**38**	-	<40	<40	**50**	**174**	-	<80	**12**	<8	<8
SV56	5	SV56-5.0	11/21/2018	D-1552	-	<8	<40	<16	<80	<16	<80	<8	-	<40	<40	<8	<8	-	<80	<10	<8	<8
	15	SV56-15.0	11/21/2018	D-1552	-	**239**	<40	<16	<80	<16	<80	**12**	-	<40	**68**	**73**	**59**	-	<80	<10	<8	<8
SV57	5	SV57-5.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	**9**	<8	-	<400	**11**	<8	<8
	15	SV57-15.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	**10**	-	<40	<40	<8	<8	-	<400	**10**	<8	<8
SV58	5	SV58-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	**9**	<12	<8
	15	SV58-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	<8	<12	<8
SV59	5	SV59-5.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	**9**	<12	<8
	15	SV59-15.0'	8/31/2018	F-0170	-	<8	<40	<16	<400	<16	<400	<8	-	<40	<40	<12	<8	-	<400	<8	<12	<8
	15	SV59-15.0'	8/31/2018	ST-12571	2.1	**2.4**	<2	<2	<20	<2	<20	<2	<2	<2	<2	<2	<2	<2	<20	<2	<2	<2
SV60	5	SV60-5.0	11/21/2018	D-1552	-	<8	<40	<16	<80	<16	<80	<8	-	<40	<40	<8	<8	-	<80	**12**	<8	<8
	15	SV60-15.0	11/21/2018	D-1552	-	**9**	<40	<16	<80	<16	<80	<8	-	<40	<40	<8	<8	-	<80	<10	<8	<8
	15	SV60-15.0'	11/21/2018	ST-13007	6.36	**11.2**	-	<5	**32.1**	<6	**39.1**	-	**46.4**	<2	**7.77**	-	-	<2	-	-	-	<3
SV61	5	SV61-5.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	**36**	<8	<8
	15	SV61-15.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	**8**	<8	<8
SV62	5	SV62-5.0	11/21/2018	D-1552	-	<8	<40	<16	<80	<16	<80	<8	-	<40	<40	<8	<8	-	<80	**11**	<8	<8
	5	SV62-5.0 REP	11/21/2018	D-1552	-	<8	<40	<16	<80	<16	<80	<8	-	<40	<40	<8	<8	-	<80	**10**	<8	<8
	15	SV62-15.0	11/21/2018	D-1552	-	<8	<40	<16	<80	<16	<80	<8	-	<40	<40	**29**	<8	-	<80	**18**	**9**	<8
SV64	19	B64-19'	9/19/2018	F-0180	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	<8	<8	<8
	20	SV64-20.0	11/21/2018	D-1552	-	**92**	<40	<16	<80	<16	<80	<8	-	<40	<40	<8	**38**	-	<80	**17**	<8	<8
	29	B64-29'	9/19/2018	F-0180	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	<8	<8	<8
	29	B64-29'	9/19/2018	ST-12676	12.4	**2.3**	-	<2	<20	<2	<20	**5.9**	**11.9**	-	**4.1**	<2	**35.5**	<2	<20	<2	<2	<2
	29	B64-29' REP	9/19/2018	F-0180	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	<8	<8	<8
	30	SV64-30.0	11/21/2018	D-1552	-	**118**	<40	<16	<80	<16	<80	<8	-	<40	<40	**44**	**44**	-	<80	**11**	<8	<8
SV65	5	SV65-5.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	**356**	<8	<8
	15	SV65-15.0'	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	**570**	**38**	<8
	15	SV65-15.0' REP	9/10/2018	F-0173	-	<8	<40	<40	<400	<8	<400	<8	-	<40	<40	<8	<8	-	<400	**496**	**33**	<8
SV110	5	SV110-5.0	6/14/2019	D-1648	-	**27**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV110-15.5	6/14/2019	D-1648	-	**509**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	**45**	-	<80	**19**	<12	<8
	15.5	SV110-15.5 REP	6/14/2019	D-1648	-	**487**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	**45**	-	<80	**19**	<12	<8
SV111	5	SV111-5.0	6/14/2019	D-1648	-	**13**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	5	SV111-5.0	6/14/2019	ST-13880	<1	**9.5**	<1	<1	<10	<1	<10	**3.4**	**4.2**	<1	<5	<1	**2.4**	<1	<10	**4**	<1	**1.7**
	15.5	SV111-15.5	6/14/2019	D-1648	-	**10**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
SV112	5	SV112-5.0	6/14/2019	D-1648	-	**12**	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
	15.5	SV112-15.5	6/14/2019	D-1648	-	<8	<40	<16	<80	<24	<80	<8	-	<40	<40	<12	<8	-	<80	<8	<12	<8
SV113	5	SV113-5.0	8/14/2019	ST-14158	13.4	**12.8**	<1	<1	<10	<1	<10	**4.6**	**14.7**	<1	**5.6**	**4.6**	**9.2**	<1	<10	**237**	**1.5**	**3.7**
	15	SV113-15.0	8/14/2019	ST-14158	27.4	<1	<1	<1	<10	<1	<10	<1	**5.7**	<1	<5	<1	<1	<1	<10	**8.4**	<1	<1
SV114	5	SV114-5.0	8/14/2019	ST-14158	13.4	**7**	<1	<1	<10	<1	<10	**2.3**	**8.3**	<1	<5	**2.2**	**3.9**	<1	<10	**37.1**	<1	**1.5**
	15	SV114-15.0	8/14/2019	ST-14158	22.8	**11.8**	<1	<1	<10	<1	<10	**1.5**	**6.1**	<1	<5	<1	**2.2**	<1	<10	**29.3**	<1	**1.6**
SV115	5	SV115-5.0	8/14/2019	ST-14158	12.7	**76.3**	<1	<1	<10	<1	<10	**6.1**	**6.2**	<1	**30.3**	**8**	**11.1**	<1	<10	**161**	**1.7**	**6.9**
	15	SV115-15.0	8/14/2019	ST-14158	<1	**16.6**	<1	<1	<10	<1	<10	**1.3**	**5.7**	<1	<5	**1.4**	**1.5**	<1	<10	**13.8**	<1	**1.9**
SV116	5	SV116-5.0	8/14/2019	ST-14158	6.7	**8.5**	<1	<1	<10	<1	<10	**2.1**	**6.8**	<1	<5	**2**	**3**	<1	<10	**69.1**	<1	**1.7**
	15	SV116-15.0	8/14/2019	ST-14158	12.7	**4.6**	<1	<1	<10	<1	<10	<1	**4.9**	<1	**9.5**	<1	**2.2**	<1	<10	**14.8**	<1	**1.3**
	15	SV116-15.0 REP	8/14/2019	ST-14158	17.6	**3.1**	<1	<1	<10	<1	<10	**1**	**7.6**	<1	<5	**1.4**	**1.3**	<1	<10	**20.5**	<1	**1.4**
SV117	5	SV117-5	11/25/2019	E911113	-	**430**	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	10	SV117-10	11/25/2019	E911113	-	**640**	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3J
	15	SV117-15	11/25/2019	E911113	-	**1300**	-	<15	-	<110	-	-	<60	-	-	-	-	-	-	-	-	<8.6
	25	SV117-25	11/25/2019	E911113	-	**1300**	-	<15	-	<110	-	-	<60	-	-	-	-	-	-	-	-	<8.6J
SV118	5	SV118-5	11/25/2019	E911115	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	5	SV118-5-Rep	11/25/2019	E911115	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	10	SV118-10	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3J
	15	SV118-15	11/25/2019	E911113	-	**4.8**	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3J
	25	SV118-25	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	25	SV118-25-Rep	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
SV119	5	SV119-5	11/25/2019	E911115	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	10	SV119-10	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	**40**	-	-	-	-	-	-	-	-	<4.3
	15	SV119-15	11/25/2019	E911113	-	**7.8**	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	25	SV119-25	11/25/2019	E911113	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
SV120	5	SV120-5	11/25/2019	E911115	-	<4.4	-	**10**	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	10	SV120-10	11/25/2019	E911113	-	<4.4	-	**10**	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	15	SV120-15	11/25/2019	E911113	-	**31**	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	25	SV120-25	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
SV121	5	SV121-5	11/25/2019	E911115	-	<4.4	-	<7.7	-	<54	-	-	**46**	-	-	-	-	-	-	-	-	<4.3
	10	SV121-10	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	15	SV121-15	11/25/2019	E911113	-	**21**	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	25	SV121-25	11/25/2019	E911113	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
SV122	5	SV122-5	11/25/2019	E911115	-	<4.4	-	<7.7	-	<54J	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	5	SV122-5-Rep	11/25/2019	E911115	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	10	SV122-10	11/25/2019	E911113	-	<4.4J	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	15	SV122-15	11/25/2019	E911113	-	<4.4	-	<7.7	-	<54J	-	-	<30	-	-	-	-	-	-	-	-	<4.3
	25	SV122-25	11/25/2019	E911113	-	<4.4	-	<7.7	-	<54	-	-	<30	-	-	-	-	-	-	-	-	<4.3

Notes

µg/m3 = micrograms per meter cubed

< = less than analytical reporting limit shown

J = estimated value

Table 7
Soil Vapor Detections
Preliminary Endangerment Assessment - Equivalent Report
LAUSD Alexander Hamilton High School, Los Angeles, California

Location	Sample Depth (ft bgs)	Field ID	Sample Date	SDG	tert-Amyl-Methyl Ether	tert-Butyl alcohol	tert-Butylbenzene	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride	Xylene (m & p)	Xylene (o)
HHRA Note 3 Res Air DTSC-SLs April 2019							210000	230		155000	41500			650000		4.75		
USEPA Res Air RSLs (TR=1E-06, HQ=1.0) April 2019, Attenuation Factor = 0.002								5500	1050000	2600000			240		105000	85		50000
					ug/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
SV01	5	SV01-5.0'	8/31/2018	F-0170	<40	<400	14	<8	-	33	<8	<8	<8	<8	-	<8	<16	<8
	15	SV01-15.0'	8/31/2018	F-0170	<40	<400	17	<8	-	29	<8	<8	<8	<8	-	<8	<16	<8
	15	SV01-15.0' REP	8/31/2018	F-0170	<40	<400	17	<8	-	26	<8	<8	<8	<8	-	<8	<16	<8
SV02	5	SV02-5.0'	9/10/2018	F-0173	<40	<400	10	12	-	29	<8	<8	<8	<8	-	<8	23	11
	15	SV02-15.0'	9/10/2018	F-0173	<40	<400	<8	10	-	10	<8	<8	<8	<8	-	<8	<8	<8
SV04	5	B4-5'	9/19/2018	F-0180	<40	<400	<8	343	-	24	<8	<8	<8	<8	-	<8	32	12
SV04A	5	SV04A-5.0	6/14/2019	D-1648	<40	<400	<12	19	-	53	<8	<8	<8	<16	-	<8	26	10
	15.5	SV04A-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	<8	<8	<8	<8	<16	-	<8	<16	<8
SV04B	5	SV04B-5.0	6/14/2019	D-1648	<40	<400	<12	<8	-	<8	<8	<8	<8	<16	-	<8	<16	<8
	5	SV04B-5.0 REP	6/14/2019	D-1648	<40	<400	<12	<8	-	<8	<8	<8	<8	<16	-	<8	<16	<8
	15.5	SV04B-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	<8	<8	<8	<8	<16	-	<8	<16	<8
SV04C	5	SV04C-5.0	6/14/2019	D-1648	<40	<400	<12	11	-	61	<8	<8	<8	<16	-	<8	37	14
	15.5	SV04C-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	11	<8	<8	<8	<16	-	<8	<16	<8
SV04D	5	SV04D-5.0	6/14/2019	D-1648	<40	<400	<12	<8	-	10	<8	<8	<8	<16	-	<8	<16	<8
	15.5	SV04D-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	18	<8	<8	<8	<16	-	<8	<16	<8
	15.5	SV04D-15.5	6/14/2019	ST-13880	<1	<10	2.5	13.2	<1	23.6	<1	-	<1	1.4	<1	<1	21.5	8.4
SV05	5	SV05-5.0'	8/31/2018	F-0170	<40	<400	<12	<8	-	20	<8	<8	<8	<8	-	<8	<16	<8
	15	SV05-15.0'	8/31/2018	F-0170	<40	<400	<12	12	-	11	<8	<8	<8	<8	-	<8	<16	<8
SV22	5	SV22-5.0'	8/31/2018	F-0170	<40	<400	<12	25	-	22	<8	<8	<8	<8	-	<8	<16	<8
	15	SV22-15.0'	8/31/2018	F-0170	<40	<400	<12	29	-	14	<8	<8	<8	<8	-	<8	<16	<8
SV23	5	SV23-5.0'	8/31/2018	F-0170	<40	<400	<12	41	-	9	<8	<8	<8	<8	-	<8	<16	8
	15	SV23-15.0'	8/31/2018	F-0170	<40	<400	<12	26	-	<8	<8	<8	<8	<8	-	<8	<16	<8
SV24	5	SV24-5.0'	8/31/2018	F-0170	<40	<400	<12	<8	-	9	<8	<8	<8	<8	-	<8	<16	<8
	15	SV24-15.0'	8/31/2018	F-0170	<40	<400	<12	<8	-	9	<8	<8	<8	<8	-	<8	<16	<8
SV53	5	SV53-5.0'	9/1/2018	ST-12616	-	-	-	<1	<1	6.4	<1	<1	<1	<1	<1	<1	5.5	3.1
	5	SV53-5.0'	9/10/2018	F-0173	<40	<400	<8	<8	-	14	<8	<8	<8	<8	-	<8	<8	<8
	15	SV53-15.0'	9/10/2018	F-0173	<40	<400	<8	<8	-	26	<8	<8	<8	<8	-	<8	<8	<8
SV54	5	SV54-5.0	6/14/2019	D-1648	<40	<400	<12	<8	-	14	<8	<8	<8	<16	-	<8	<16	<8
	15.5	SV54-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	<8	<8	<8	<8	<16	-	<8	<16	<8
SV55	5	SV55-5.0	11/21/2018	D-1552	<40	<400	-	<8	-	10	<8	<8	<8	<10	-	<8	<16	<8
	15	SV55-15.0	11/21/2018	D-1552	<40	<400	<8	<8	-	4590	<8	<8	<8	<10	-	<8	3840	1260
SV56	5	SV56-5.0	11/21/2018	D-1552	<40	<400	<8	<8	-	<8	<8	<8	<8	<10	-	<8	<16	<8
	15	SV56-15.0	11/21/2018	D-1552	<40	<400	<8	<8	-	1090	<8	<8	<8	<10	-	<8	1040	338
SV57	5	SV57-5.0'	9/10/2018	F-0173	<40	<400	<8	10	-	17	<8	<8	<8	<8	-	<8	20	10
	15	SV57-15.0'	9/10/2018	F-0173	<40	<400	<8	10	-	24	<8	<8	<8	<8	-	<8	17	9
SV58	5	SV58-5.0'	8/31/2018	F-0170	<40	<400	<12	13	-	9	<8	<8	<8	<8	-	<8	<16	<8
	15	SV58-15.0'	8/31/2018	F-0170	<40	<400	<12	<8	-	16	<8	<8	<8	<8	-	<8	<16	<8
SV59	5	SV59-5.0'	8/31/2018	F-0170	<40	<400	<12	<8	-	11	<8	<8	<8	<8	-	<8	<16	<8
	15	SV59-15.0'	8/31/2018	F-0170	<40	<400	<12	<8	-	11	<8	<8	<8	<8	-	<8	<16	<8
	15	SV59-15.0'	8/31/2018	ST-12571	<2	<2	<2	2.9	<2	5.9	<20	-	<2	<2	<2	<2	6.2	2.8
SV60	5	SV60-5.0	11/21/2018	D-1552	<40	<400	<8	<8	-	12	<8	<8	<8	<10	-	<8	<16	<8
	15	SV60-15.0	11/21/2018	D-1552	<40	<400	<8	<8	-	70	<8	<8	<8	<10	-	<8	38	13
	15	SV60-15.0'	11/21/2018	ST-13007	-	-	-	2.06	<2	75	<2	<3	<3	3.1	<4	<2	41.9	14.4
SV61	5	SV61-5.0'	9/10/2018	F-0173	<40	<400	<8	<8	-	19	<8	<8	<8	<8	-	<8	<8	<8
	15	SV61-15.0'	9/10/2018	F-0173	<40	<400	<8	13	-	11	<8	<8	<8	<8	-	<8	<8	<8
SV62	5	SV62-5.0	11/21/2018	D-1552	<40	<400	<8	<8	-	<8	<8	<8	<8	<10	-	<8	<16	<8
	5	SV62-5.0 REP	11/21/2018	D-1552	<40	<400	<8	<8	-	<8	<8	<8	<8	<10	-	<8	<16	<8
	15	SV62-15.0	11/21/2018	D-1552	<40	<400	<8	<8	-	48	<8	<8	<8	<10	-	<8	21	<8
SV64	19	B64-19'	9/19/2018	F-0180	<40	<400	<8	16	-	13	<8	<8	<8	<8	-	<8	<8	<8
	20	SV64-20.0	11/21/2018	D-1552	<40	<400	<8	<8	-	191	<8	<8	<8	<10	-	<8	396	128
	29	B64-29'	9/19/2018	F-0180	<40	<400	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8	<8
	29	B64-29'	9/19/2018	ST-12676	-	-	<2	5.3	2.6	4.9	<20	-	<2	<2	<2	<2	7.8	4
	29	B64-29' REP	9/19/2018	F-0180	<40	<400	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8	<8
	30	SV64-30.0	11/21/2018	D-1552	<40	<400	<8	<8	-	311	<8	<8	<8	<10	-	<8	494	145
SV65	5	SV65-5.0'	9/10/2018	F-0173	<40	<400	32	<8	-	37	<8	<8	<8	<8	-	<8	17	9
	15	SV65-15.0'	9/10/2018	F-0173	<40	<400	55	<8	-	14	<8	<8	<8	<8	-	<8	<8	<8
	15	SV65-15.0' REP	9/10/2018	F-0173	<40	<400	46	<8	-	13	<8	<8	<8	<8	-	<8	<8	<8
SV110	5	SV110-5.0	6/14/2019	D-1648	<40	<400	<12	<8	-	55	<8	<8	<8	<16	-	<8	173	70
	15.5	SV110-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	2690	<8	<8	<8	<16	-	<8	2060	561
	15.5	SV110-15.5 REP	6/14/2019	D-1648	<40	<400	<12	<8	-	2540	<8	<8	<8	<16	-	<8	1980	544
SV111	5	SV111-5.0	6/14/2019	D-1648	<40	<400	<12	<8	-	36	<8	<8	<8	<16	-	<8	61	24
	5	SV111-5.0	6/14/2019	ST-13880	<1	<10	2.9	10.4	<1	21.9	<1	-	<1	1	<1	<1	40.1	16.3
	15.5	SV111-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	9	<8	<8	<8	<16	-	<8	66	25
SV112	5	SV112-5.0	6/14/2019	D-1648	<40	<400	<12	<8	-	78	<8	<8	<8	<16	-	<8	51	16
	15.5	SV112-15.5	6/14/2019	D-1648	<40	<400	<12	<8	-	<8	<8	<8	<8	<16	-	<8	<16	<8
SV113	5	SV113-5.0	8/14/2019	ST-14158	<1	<10	<1	7.4	1.3	56.3	<1	-	<1	1.6	<1	<1	50.9	16.8
	15	SV113-15.0	8/14/2019	ST-14158	<1	<10	<1	3.4	<1	1.4	<1	-	<1	1.4	<1	<1	1.2	<1
SV114	5	SV114-5.0	8/14/2019	ST-14158	<1	<10	<1	12.6	<1	11.4	<1	-	<1	2.4	<1	<1	54.6	18.7
	15	SV114-15.0	8/14/2019	ST-14158	<1	<10	<1	6.3	<1	9	<1	-	<1	2.2	<1	<1	60.4	18.5
SV115	5	SV115-5.0	8/14/2019	ST-14158	<1	<10	<1	8.7	<1	100	<1	-	<1	2.6	<1	<1	354	132
	15	SV115-15.0	8/14/2019	ST-14158	<1	<10	<1	5.3	<1	14	<1	-	<1	2.4	<1	<1	86.8	26.5
SV116	5	SV116-5.0	8/14/2019	ST-14158	<1	<10	<1	4.4	<1	24.2	<1	-	<1	1.6	<1	<1	36.7	12.5
	15	SV116-15.0	8/14/2019	ST-14158	<1	<10	2.2	2.4	<1	15.7	<1	-	<1	1.5	<1	<1	19.6	9.2
	15	SV116-15.0 REP	8/14/2019	ST-14158	<1	<10	<1	4	<1	11.2	<1	-	<1	1.8	<1	<1	12.5	3.8
SV117	5	SV117-5	11/25/2019	E911113	-	-	-	36	-	1100	<8	<4.6	<5.5	<5.6	-	<2.6	1700	510
	10	SV117-10	11/25/2019	E911113	-	-	-	27	-	1700	<8	<4.6	<5.5	<5.6	-	<2.6	2500	870
	15	SV117-15	11/25/2019	E911113	-	-	-	73	-	3400	<16	<9.2	<11	<11	-	<5.2	5000	1600
	25	SV117-25	11/25/2019	E911113	-	-	-	33	-	4600	<16	<9.2	<11	<11	-	<5.2	5400	1500
SV118	5	SV118-5	11/25/2019	E911115	-	-	-	<6.9	-	<3.8	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8	<4.4
	5	SV118-5-Rep	11/25/2019	E911115	-	-	-	<6.9	-	8	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4
	10	SV118-10	11/25/2019	E911113	-	-	-	<6.9J	-	14	<8	<4.6	<5.5	<5.6	-	<2.6	15	5.4
	15	SV118-15	11/25/2019	E911113	-	-	-	<6.9J	-	17	<8	<4.6	<5.5	<5.6J	-	<2.6	17	6.3
	25	SV118-25	11/25/2019	E911113	-	-	-	10	-	7.1	<8	<4.6	<5.5	<5.6J	-	<2.6	9.3	<4.4J
	25	SV118-25-Rep	11/25/2019	E911113	-	-	-	13	-	10	<8	<4.6	<5.5	<5.6J	-	<2.6	15	4.7
SV119	5	SV119-5	11/25/2019	E911115	-	-	-	18	-	13	<8	<4.6	<5.5	<5.6	-	<2.6	9.1	<4.4
	10	SV119-10	11/25/2019	E911113	-	-	-	<6.9J	-	12	<8	<4.6	<5.5	<5.6	-	<2.6	9.5	<4.4J
	15	SV119-15	11/25/2019	E911113	-	-	-	8.2	-	43	<8	<4.6	<5.5	<5.6J	-	<2.6	25	8.7
	25	SV119-25	11/25/2019	E911113	-	-	-	13	-	5.2	<8	<4.6	<5.5	<5.6J	-	<2.6	<8.8J	<4.4
SV120	5	SV120-5	11/25/2019	E911115	-	-	-	<6.9	-	<3.8	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8	<4.4
	10	SV120-10	11/25/2019	E911113	-	-	-	<6.9	-	6.4	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4J
	15	SV120-15	11/25/2019	E911113	-	-	-	<6.9J	-	87	<8	<4.6	<5.5	<5.6	-	<2.6	140	57
	25	SV120-25	11/25/2019	E911113	-	-	-	<6.9J	-	9	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4J
SV121	5	SV121-5	11/25/2019	E911115	-	-	-	<6.9	-	5.2	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4
	10	SV121-10	11/25/2019	E911113	-	-	-	<6.9	-	6.6	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4J
	15	SV121-15	11/25/2019	E911113	-	-	-	7.4	-	140	<8	<4.6	<5.5	<5.6	-	<2.6	73	22
	25	SV121-25	11/25/2019	E911113	-	-	-	<6.9J	-	3.9	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4
SV122	5	SV122-5	11/25/2019	E911115	-	-	-	<6.9	-	4.5	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4
	5	SV122-5-Rep	11/25/2019	E911115	-	-	-	<6.9	-	4.4	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4
	10	SV122-10	11/25/2019	E911113	-	-	-	<6.9J	-	21	<8	<4.6	<5.5	<5.6	-	<2.6	11	<4.4J
	15	SV122-15	11/25/2019	E911113	-	-	-	<6.9	-	9.2	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4
	25	SV122-25	11/25/2019	E911113	-	-	-	<6.9J	-	6.7	<8	<4.6	<5.5	<5.6	-	<2.6	<8.8J	<4.4

Notes
µg/m3 = micrograms per meter cubed
< = less than analytical reporting limit shown
J = estimated value

APPENDIX A
BORING LOGS

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Number: Sample identification number.
3 USCS Symbol: Type of material encountered.
4 Graphic Log: Graphic depiction of the subsurface material encountered.
5 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
6 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Fat CLAY, CLAY w/SAND, SANDY CLAY (CH)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Portland Cement Concrete
AF
Poorly graded GRAVEL (GP)
Poorly graded GRAVEL with Silt (GP-GM)
Limestone
SILT, SILT w/SAND, SANDY SILT (ML)
Clayey SAND (SC)
Silt
Silty SAND (SM)
Poorly graded SAND (SP)
Poorly graded SAND with Silt (SP-SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV1 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**Near north-central boundary of school**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		4-inch thick asphalt, no base material		
	48/48	SC		CLAYEY SAND (SC) - black (7.5YR 2.5/1), damp, dense, fine grained, with trace medium and coarse grains, poorly graded, none to low plasticity		
5	48/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, dense, fine grained, poorly graded		
	48/48	CL		SANDY CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, sand is fine grained, none to low plasticity		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV1

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		CL		SANDY CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, sand is fine grained, none to low plasticity		
	48/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, dense, fine grained, poorly graded		
		CL		SANDY CLAY (SC) with silt - dark brown (7.5YR 3/4), damp, firm, sand is fine grained, none to low plasticity		
	42/42	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, fine grained, dense, poorly graded		
		CL		SANDY CLAY (SC) with silt - dark brown (7.5YR 3/4), damp, firm, sand is fine grained, none to low plasticity		
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B2/SV2 **Sheet 1 of 2**

Date(s) Drilled	**9/10/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**North boundary of school, near to Cattaraugus Ave.**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		3-inch thick concrete, no base material		
		SC		CLAYEY SAND (SC) - dark brown (7.5YR 3/3), damp, dense, very fine to fine grained, poorly graded, low plasiticity		
	48/48					
		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
5						
	48/48					
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring B2/SV2

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	48/48	ML		SANDY SILT (ML) - dark yellowish brown (10YR 3/4), damp, firm, sand is very fine to fine grained, none to low plasticity		
	42/42	ML SP		From 12-15 feet bgs, SANDY SILT (ML) grades into SAND (SP) - dark yellowish brown (10YR 3/4), damp, medium dense, fine to medium grained, poorly graded		
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B03 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Wes Skillings**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	3-inch thick asphalt, no base material	
	B03-0.5	0.0		SC	CLAYEY SAND (SC) - dark brown (7.5YR 3/3), damp, medium dense, medium grained, poorly graded, low plasiticity	
	B03-1.5	0.0		CL	CLAY (CL) - dark brown (7.5YR 3/4), damp, hard, fine sand, medium plasticity	
	B03-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B03A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" east of B03**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, low plasticity	
				Total depth of boring = 1.5 ft bgs	
5	B03A-1.5				
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B03B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**21" south of B03**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, low plasticity	
				Total depth of boring = 1.5 ft bgs	
5	B03B-1.5				
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B03C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**24" west of B03**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, low plasticity, trace asphalt pieces	
				Total depth of boring = 1.5 ft bgs	
5	B03C-1.5				
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B04/SV04 **Sheet 1 of 1**

Date(s) Drilled **9/19/2018**	Logged By **Daniel Phepls**	Checked By **Clare Steedman, PG**
Drilling Method **Direct Push**	Drill Bit Size/Type **2.25-inch rods**	Total Depth of Borehole **5.5 feet bgs**
Drill Rig Type **6620 DT track mounted Geoprobe**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Acetate liners**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		4-inch thick asphalt, no base material		
		CL		CLAY (CL) - dark brown (7.5YR 3/3), damp, soft to firm, trace very fine sand, low plasiticity		
5				Total Depth = 5.5 feet bgs		
10						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV04A **Sheet 1 of 2**

Date(s) Drilled	**6/11/19**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt with 1 inch of base fill		
		ML		CLAYEY SILT, dark yellowish brown, 10YR 3/4, damp, medium stiff, no plasticity, (0% gravel, 0% sand, 100% fines), no odor	hand auger to 5 feet Hydrated #8 Dry #8 #3 Sand Vapor Probe Hydrated #8	
5	36/36					
	48/48					
		ML		trace coarse sands, (0, 5, 95)		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV04A

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	ML		trace coarse sands, (0, 5, 95) 8 inch interbedded layer of SAND, yellowish brown 10YR 5/4, damp, fine sand, poorly graded		
		SM-ML		SANDY CLAYEY SILT, yellowish brown, 10YR 5/6, damp, stiff, fine sand, low plasticity, trace micas, (0, 20, 80)		
15						Dry #8 #3 Sand Vapor Probe
				Bottom of boring at 16ft bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV04B **Sheet 1 of 2**

Date(s) Drilled	**6/11/19**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt		
		CL		SILTY CLAY, dark yellowish brown, 10YR 3/4, damp, medium stiff, no plasticity, (0% gravel, 0% sand, 100% fines), no odor	hand auger to 5 feet Hydrated #8 Dry #8 #3 Sand Vapor Probe Hydrated #8	
5	36/36					
	48/48					
		SP		GRAVELLY SAND, brown, 10YR 4/3, damp, medium sand, fine gravel, poorly graded, sub rounded (15, 85, 0)		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV04B

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	SP		GRAVELLY SAND, brown, 10YR 4/3, damp, medium sand, fine gravel, poorly graded, sub rounded (15, 85, 0)		
				6 inch interbedded layer of SAND, yellowish brown 10YR 5/4, damp, fine sand, poorly graded		
		SM-ML		SANDY CLAYEY SILT, brown, 10YR 4/3, damp, stiff, fine sand, low plasticity, trace micas, (0, 20, 80)		
		SM-ML		Thin sand layer, fine sand	Dry #8	
15					#3 Sand Vapor Probe	
				Bottom of boring at 16ft bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV04C **Sheet 1 of 2**

Date(s) Drilled	**6/11/19**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt		
		CL		SILTY CLAY, very dark brown, 10YR 2/2, damp, medium stiff, no plasticity, (0% gravel, 0% sand, 100% fines), no odor	hand auger to 5 feet Hydrated #8 Dry #8 #3 Sand Vapor Probe Hydrated #8	
5	36/36					
		CL		Trace fine gravel		
	24/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV04C

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		CL		Trace fine gravel		
	48/48	SP		SAND, dark brown 10YR 3/3, damp, fine sand, poorly graded (0, 95, 5)		
		SP		CLAYEY SILTY SAND, brown, 10YR 4/3, damp, fine sand, poorly graded, (0, 70, 30)	Dry #8	
15					#3 Sand Vapor Probe	
				Bottom of boring at 16ft bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV04D **Sheet 1 of 2**

Date(s) Drilled	**6/11/19**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt	hand auger to 5 feet	
		ML		CLAYEY SILT, dark brown, 10YR 3/3, damp, medium stiff, no plasticity, (0% gravel, 0% sand, 100% fines), no odor		
					Hydrated #8	
					Dry #8	
				Increase in fine sand to 5% decrease in clay 5%		
					#3 Sand	
5	36/36				Vapor Probe	
					Hydrated #8	
				Thin slate layer, 1 inch thick with fine gravel		
				Trace fine gravel		
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV04D

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		ML		Trace fine gravel		
	48/48	SP		SAND, dark brown 10YR 3/3, damp, fine sand, poorly graded (0, 95, 5)		
		ML		SILT, dark brown, 10YR 3/3, damp, stiff, low plasticity, trace clay, (0, 0, 100)	Dry #8	
15					#3 Sand Vapor Probe	
				Bottom of boring at 16ft bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B5/SV5 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**North-central portion of school, near west side of technology classrooms**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		5-inch thick asphalt no base material		
	48/48	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, trace fine sand, low plasiticity		
5	48/48			Increase in fine sand, becomes SANDY CLAY (CL)		
	48/48	SM		SILTY SAND (SM) with clay - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring B5/SV5

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	SM		SILTY SAND (SM) with clay - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	42/42	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, trace fine sand, low plasiticity		
		SW		SAND (SW) - dark yellowish brown (10YR 3/4), damp, medium dense, fine to coarse grained with common gravels, well graded		
15		ML		SILT (ML) - dark brown (7.5YR 3/4), soft, damp, no-low plasticity		
				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B06 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Wes Skillings**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	3-inch thick asphalt, no base material	
	B06-0.5	0.0		CL	CLAY (CL) - dark brown (7.5YR 3/3), damp, firm, low to medium plasticity	
	B06-1.5	0.0				
	B06-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B07 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Daniel Phelps**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	2-inch thick asphalt, no base material	
	B07-0.5	0.0		CL	SANDY CLAY (CL) - dark brown (7.5YR 3/3), damp, soft to firm, sand is very fine to fine grained, low plasiticity	
	B07-1.5	0.0				
	B07-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B08 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Daniel Phelps**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	2-inch thick asphalt on top of 3-inches of gravelly base material	
	B08-0.5	0.0		CL	CLAY (CL) - dark brown (7.5YR 3/3), damp, soft to firm, sand is fine to very fine grained, low plasiticity	
	B08-1.5	0.0				
	B08-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B09 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Daniel Phelps**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	3-inch thick asphalt on top of 2-inches of gravelly base material	
	B09-0.5	0.0		GM	CLAY (CL) - dark brown (7.5YR 3/3), damp, soft, medium plasiticity	
	B09-1.5	0.0				
	B09-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B10 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Daniel Phelps**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	2-inch thick asphalt, no base material	
	B10-0.5	0.0		CL	SANDY CLAY (CL) - dark brown (7.5YR 3/3), dry near surface becomes damp with depth, soft to firm, sand is very fine grained, low plasiticity	
	B10-1.5	0.0				
	B10-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B10A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" north of B10**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
	B10A-0.5	CL		SILTY CLAY (CL), very dark brown (10YR 2/2), damp, stiff, medium plasticity, trace fine sand	Duplicate collected (B10A-0.5-DUP)
				Total depth of boring = 0.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B10B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" south of B10**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
	B10B-0.5	CL		SILTY CLAY (CL), dark brown (10YR 2/2), damp, stiff, medium plasticity, trace fine sand	
				Total depth of boring = 0.5 ft bgs	
5					
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B10C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" west of B10**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
	B10C-0.5	CL		SILTY CLAY (CL), dark brown (10YR 2/2), damp, stiff, medium plasticity, trace fine sand	
				Total depth of boring = 0.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B11 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B11-0.5 B11-1.5 B11-2.5	CL		SILTY CLAY (CL), dark brown, damp, trace gravel, medium plasticity	
				Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B11A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**42" east and 42" north of B11**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		Approximately 4" of brick and base	
		SM		SILTY SAND (SM), brown (10YR 4/3), dry, loose, trace gravel, poorly graded	
	B11A-1.5				Duplicate collected (B11A-1.5-DUP)
	B11A-2.5	CL		SILTY CLAY (ML), very dark brown (10YR 2/2), damp, stiff, medium plasticity	
	B11A-3.5			Total depth of boring = 3.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B11B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**42" east of B11**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		Approximately 3" of brick and base	
		CL		SANDY CLAY (CL), very dark brown (10YR 2/2), damp, stiff, fine sand, low plasticity, mix of clay and sand from base	
	B11B-1.5				
	B11B-2.5	CL		SILTY CLAY (CL), very dark brown (10YR 2/2), damp, stiff, medium plasticity	
	B11B-3.5			Total depth of boring = 3.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B11C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**38" south of B11**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		Approximately 10" of concrete	
		CL		SILTY CLAY (CL), very dark brown (10YR 2/2), damp, soft, medium plasticity, trace fine sands	
	B11C-1.5				
	B11C-2.5				
	B11C-3.5			Total depth of boring = 3.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B11D **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**77" west of B11**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		Approximately 3" of brick	
		CL		SANDY CLAY (CL), very dark brown (10YR 2/2), damp, soft, fine sands, low plasticity, trace gravel, mix of clay and sand from base material	
	B11D-1.5				
	B11D-2.5	ML		SILTY CLAY (CL), very dark brown (10YR 2/2), damp, very soft, medium plasticity	
	B11D-3.5			Total depth of boring = 3.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B12 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B12-0.5	SM		SILTY SAND (SM), light brown, dry, well graded, trace gravel	
	B12-1.5	CL		SILTY CLAY (CL), dark brown, dry, medium plasticity	
	B12-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B12 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Northwest portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B13-0.5	CL		SANDY CLAY (CL), dark brown, damp, soft to firm, fine to medium grained sand, low plasticity	Duplicate sample: B13-0.5-DUP
	B13-1.5				
	B13-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B12A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" north of B12**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B12A-0.5	SM		SILTY SAND (SM), dark yellowish brown (10YR 3/6), dry, loose, fine sand, poorly graded, trace gravels	
				Total depth of boring = 0.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B12B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" east of B12**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B12B-0.5	SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, trace fine sands, low plasticity	
				Total depth of boring = 0.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B12C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**34" southof B12**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B12C-0.5	SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, low plasticity	
				Total depth of boring = 0.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B12D **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" west of B12**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B12D-0.5	SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, low plasticity	
				Total depth of boring = 0.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B13 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Northwest portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B13-0.5	CL		SANDY CLAY (CL), dark brown, damp, soft to firm, fine to medium grained sand, low plasticity	Duplicate sample: B13-0.5-DUP
	B13-1.5				
	B13-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B14 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B14-0.5	CL		SILTY CLAY (CL), dark brown, damp, medium plasticity	
	B14-1.5				
	B15-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B15 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Northwest portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B15-0.5	CL		SANDY CLAY (CL), dark brown, damp, soft to firm, fine to medium grained sand, low plasticity	
	B15-1.5				
	B15-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B16 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Daniel Phelps**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				CL	Bare ground surface	
	B16-0.5	0.0				
				CL	SANDY CLAY (CL) - dark brown (7.5YR 3/3), damp, soft to firm, fine grained sand, low plasticity	
	B16-1.5	0.0				
	B16-2.5	0.0			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B17 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Wes Skillings**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school, near east side of girl's gym**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	3-inch thick asphalt, 2-inch thick gravelly base material	
	B17-0.5 B17-1.5 B17-2.5			SC	CLAYEY SAND (SC) - dark brown (7.5YR 3/3), dry to damp, medium dense, fine grained, poorly graded, low plasiticity	
					Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B18 **Sheet 1 of 1**

Date(s) Drilled	**9/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		CL		SILTY CLAY (CL), dark brown, dry, trace sand, medium plasticity	
	B18-0.5				
	B18-1.5				
	B18-2.5				
				Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B18A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**14" north of B18**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
		SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, medium plasticity	
	B18A-2.5				
	B18A-3.5			Total depth of boring = 3.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B18B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**32" east and 20" south of B18**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
		SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, medium plasticity	
	B18B-2.5				Duplicated collected, B18B-2.5-DUP
	B18B-3.5			Total depth of boring = 3.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B18C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**20" south of B18**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
		SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, medium plasticity	
		Limestone		White "Chalk Layer" approximately 2 to 3 inches thick	
	B18C-2.5				
	B18C-3.5			Total depth of boring = 3.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B18D **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**3.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**22" west of B18**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
		SM		SILTY CLAY (CL), dark brown (10YR 3/3), damp, stiff, medium plasticity	
	B18D-2.5				
	B18D-3.5			Total depth of boring = 3.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B19 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		CL		SILTY CLAY (CL), dark brown, dry, trace sand, medium plasticity	
	B19-0.5				Duplicate sample: B19-0.5-dup
	B19-1.5				Duplicate sample: B19-1.5-dup
	B19-2.5				Duplicate sample: B19-2.5-dup
				Total Depth = 2.5 feet bgs	
5					
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B20 **Sheet 1 of 1**

Date(s) Drilled	**11/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		CL		SILTY CLAY (CL), dark brown, dry, trace sand, medium plasticity	
	B20-0.5				
	B20-1.5				
	B20-2.5				
				Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B20A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**48" north of B20**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B20A-0.5	SM		SILTY SAND (SM), greyish brown (10YR 5/2), dry, loose, fine sand, poorly graded, trace gravels	
				Total depth of boring = 0.5 ft bgs	
5					
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B20B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**54" east of B20**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B20B-0.5	SM		SILTY SAND (SM), greyish brown (10YR 5/2), dry, loose, fine sand, poorly graded, trace gravels	
				Total depth of boring = 0.5 ft bgs	
5					
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B20C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**48" south of B20**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B20C-0.5	SM		SILTY SAND (SM), greyish brown (10YR 5/2), dry, loose, fine sand, poorly graded, trace gravels	
				Total depth of boring = 0.5 ft bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B20D **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**48" west of B20**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B20D-0.5	SM		SILTY SAND (SM), greyish brown (10YR 5/2), dry, loose, fine sand, poorly graded, trace gravels	
				Total depth of boring = 0.5 ft bgs	
5					
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B21 **Sheet 1 of 1**

Date(s) Drilled	**11/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		CL		SILTY CLAY (CL), dark brown, dry, trace sand, medium plasticity	
	B21-0.5				
	B21-1.5				
	B21-2.5				
				Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV22 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**North-central portion of school, near northwest corner of arts building**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		5-inch thick asphalt, no base material		
	48/48	SC		SILTY CLAY with sand (SC) - dark brown (7.5YR 3/4), damp, soft to firm, sand is fine grained, low plasticity		
5	48/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
10	48/48			Increase in coarse sand and gravel from 8-10 feet bgs		

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV22

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	CL		CLAY with silt and sand (CL) - dark brown (7.5YR 3/4), damp, soft to firm, sand is fine grained, low plasticity		
		SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	42/42	SM		Increase in coarse sand and gravel from 13.5-14 feet bgs		
		ML		SILT with sand (ML) - dark brown (7.5YR 3/4), damp, soft, sand is fine grained, none to low plasticity		
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV23 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**North-central portion of school, near west side of arts building**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		6-inch thick asphalt, 1-inch of gravelly base material		
		CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, trace fine sand, low plasticity		
	48/48					
5						
	48/48					
		CL		Becomes SANDY CLAY from 6-7, sand is fine grained		
	32/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV23

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		CL		Becomes SANDY CLAY from 6-7, sand is fine grained		
	32/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	42/42	SW		SAND (SW) - dark yellowish brown 10YR 3/4, damp, medium dense, fine to coarse grained with gravel, well graded		
		ML		SILT (ML) - dark brown (7.5YR 3/4), damp, soft, trace fine sand, none to low plasticity		
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV24 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**North-central portion of school, near west side of arts building**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		5-inch thick concrete, no base material		
		SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded, trace gravels, rootlets		
	48/48	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, hard, trace fine sand, low plasiticity		
		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
5	48/48					
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV24

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	48/48	CL		CLAY (CL) - dark yellowish brown (10YR 3/4), damp, hard, trace fine sand, low plasticity		
		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	42/42					
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B25 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B25-0.5	SM		SILTY SAND (SM), light brown, dry, well graded	
		CL		SILTY CLAY (CL), dark brown, dry, medium plasticity	
	B21-1.5				
	B21-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B25A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**31" north of B25**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B25A-0.5	CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, low plasticity, trace fine sands and gravels	
				Total depth of boring = 0.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B25B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" east of B25**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B25B-0.5	CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, low plasticity, trace sands and gravels	
				Total depth of boring = 0.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B25C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**20" south of B25**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B25C-0.5	CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, low plasticity, trace sands and gravels	
				Total depth of boring = 0.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B25D **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**0.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" west of B25**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt	
	B25D-0.5	CL		SILTY CLAY (CL), dark brown (10YR 3/3), damp, hard, low plasticity, trace sands and gravels	
				Total depth of boring = 0.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B26 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B26-0.5	SC		CLAYEY SAND (SC), dark yellowish brown, moist, fine to coarse grained, moderately well graded	Duplicate sample: B26-0.5-DUP
	B26-1.5	CL		SANDY CLAY (CL), dark brown, damp, soft to firm, fine to medium grained sand, low plasticity	Duplicate sample: B26-1.5-DUP
	B26-2.5			Total Depth = 2.5 feet bgs	B26-2.5-DUP
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B27 **Sheet 1 of 1**

Date(s) Drilled **9/10/2018**	Logged By **Daniel Phelps**	Checked By **Clare Steedman, PG**
Drilling Method **Hand auger**	Drill Bit Size/Type **3-inch**	Total Depth of Borehole **2.5 feet bgs**
Drill Rig Type **NA**	Drilling Contractor **Strongarm Environmental Field Services**	Approximate Surface Elevation **~125 feet amsl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s) **Hand auger**	Hammer Data **NA**
Borehole Backfill **Backfill with native and patched to match existing ground surface**	Location **North central portion of school, on east side of girl's gym**	

Depth (feet)	Sample Number	PID Reading, ppm	Graphic Log	Material Type	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt	3-inch thick asphalt on top of 2-inches of gravelly base material	
	B27-0.5	0.0		CL	CLAY (CL) - dark brown (7.5YR 3/3), damp, firm, fine sand, low plasticity	
	B27-1.5	0.0				
	B27-2.5	0.0			Total Depth = 2.5 feet bgs	
5						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B28 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		4-inch thick concrete, no base	
	B28-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	
	B28-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low plasticity	
	B28-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B29 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B29-0.5	CL		SILTY CLAY (CL), dark brown, dry, medium plasticity	
	B29-1.5				
	B29-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B30 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B30-0.5	SP		GRAVELLY SAND (SP), light brown, wet, well graded	
		CH		CLAY (CH), damp, very fine sand, high plasticity	
	B30-1.5				
	B30-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B31 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		4-inch thick concrete, no base	
	B31-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	
	B31-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low plasticity	
	B31-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B32 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete		4-inch thick concrete, no base	
	B32-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	
	B32-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low plasticity	
	B32-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B41 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B41-0.5	CL		SILTY CLAY (CL), dark brown, damp, traces of sand and gravel, medium plasticity	
	B41-1.5				
	B41-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B42 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**1.0 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
		Fill		BASE	
	B42-0.5	SC		CLAYEY SAND (SC) with gravel and cobbles, dark yellowish brown, dry to moist, fine to coarse grained, well graded	
				Total Depth = 1.0 feet bgs, refusal encountered	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B43 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
		Fill		BASE	
	B43-0.5	CL		SANDY CLAY (CL), dark brown, dry to moist, soft to firm, fine sand, low plasticity	
				Gravels from 1 to 2 feet bgs	
	B43-1.5				
	B43-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B44 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
		Fill		BASE	
	B44-0.5	CL		SANDY CLAY (CL), dark brown, moist, soft to firm, fine sand, low plasticity, brick fragments (fill)	
	B44-1.5				
	B44-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B45 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B45-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	
	B45-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low-plasticity	
	B45-2.5			Total Depth = 2.5 feetbgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B46 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B46-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	Duplicate at 0.5 feet
	B46-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low-plasticity	Duplicate at 1.5 feet
	B46-2.5			Total Depth = 2.5 feetbgs	Duplicate at 2.5 feet
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B47 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B47-0.5	SM		SILTY SAND (SM), light brown, dry, well graded	
	B47-1.5	CL		SILTY CLAY (CL), dark brown, dry, medium plasticity	
	B47-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B48 **Sheet 1 of 1**

Date(s) Drilled	**9/10/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B48-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	
	B46-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low-plasticity	
	B46-2.5			Total Depth = 2.5 feetbgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B49 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B49-0.5	CL		SILTY CLAY (CL), dark brown, damp, medium plasticity	
	B49-1.5				
	B49-2.5			Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B50 **Sheet 1 of 1**

Date(s) Drilled	**11/19/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Western portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
	B48-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained with trace coarse grains, poorly graded, fines are non-plastic	
	B46-1.5	CL		SANDY CLAY (CL), dark brown, moist, firm, low-plasticity	
	B46-2.5			Total Depth = 2.5 feetbgs	
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10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B51 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**South side of Humanities Building**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B51-0.5 B51-1.5	CL		CLAY (CL), dark brown, moist, soft to firm, trace fine sand, low plasticity, roots	Duplicate sample: B51-0.5-DUP Duplicate sample: B51-1.5-DUP
				Total Depth = 1.8 feet bgs, encountered concrete footing of adjacent building	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B52 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B52-0.5 B52-1.5 B52-2.5	CL		SILTY CLAY (CL), brown to black, damp, trace gravel and sand, medium plasticity	
				Total Depth = 2.5 feet bgs	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B53/SV53 **Sheet 1 of 2**

Date(s) Drilled	**9/10/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**Southeast-central portion of school, near north side of photo studio building**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		3-inch thick asphalt no base material		
	48/48	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, hard, sand is very fine, none to low plasiticity		
		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded, with trace gravels to 1.0-inches diameter		
5	48/48					
	48/48					
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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring B53/SV53

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded, with trace gravels to 1.0-inches diameter		
	42/42	SP		SAND (SP) - dark yellowish brown (10YR 3/4), medium dense, fine to medium grained, poorly graded, trace coarse grains and gravels to 1-inch diameter		
15		SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, very fine to fine grained, poorly graded, with trace gravels to 1.0-inches diameter		
				Total Depth = 15.5 feet bgs		
20						
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B53A **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Tanner Rickard/Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" North of B53**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 1.5" of asphalt and 2" of base	
		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, low plasticity, approximately 40% clay, no odor	
				Increasing fine sand content	
		CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), damp, stiff, fine sand, low plasticity, approximately 10% gravel, red oxidation nodules	
5	B53A-5.0				
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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B53A

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	~~B53A-10.0~~	CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), damp, stiff, fine sand, low plasticity, approximately 10% gravel, red oxidation nodules	
		ML		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, hard, medium plasticity	
		SM		SILTY SAND (SM), light brownish grey (10YR 6/2), dry, loose, fine sand, poorly graded	
15	B53A-15.0	CL		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, stiff, low plasticity, trace gravels	
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated granular bentonite, sand and concrete to match surface completion	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B53B **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Tanner Rickard/Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" East of B53**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 1.5" of asphalt and 2" of base	
		ML		CLAYEY SILT (ML), brown (10YR 4/2), damp, stiff, low plasticity, approximately 30 to 40% clay, no odor	
		CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), damp, stiff, low plasticity, approximately 10% gravel, red oxidation	
5	B53B-5.0				
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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B53B

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	~~B53B-10.0~~	CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), damp, stiff, low plasticity, approximately 10% gravel, red oxidation	
		ML		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, hard, medium plasticity, root dendrites	
		SM		SILTY SAND (SM), light brownish grey (10YR 6/2), dry, loose, fine sand	
15	B53B-15.0	CL		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, stiff, low plasticity, trace gravels	
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated granular bentonite, sand and concrete to match surface completion	
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B53C **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Tanner Rickard/Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" South of B53**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 1.5" of asphalt and 3" of base	
		ML		CLAYEY SILT (ML), brown (10YR 4/2), damp, stiff, low plasticity, approximately 40% clay, no odor	
				↓ Increasing fine sand and gravel content	
		CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), damp, stiff, low plasticity, approximately 10% gravel	
5	B53C-5.0				
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B53C

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	~~B53C-10.0~~	CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), damp, stiff, low plasticity, approximately 10% gravel	
		ML		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, hard, medium plasticity, root dendrites	
		SM		SILTY SAND (SM), light brownish grey (10YR 6/2), dry, loose, fine sand	
15	B53C-15.0	CL		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, stiff, low plasticity, trace gravels	
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated granular bentonite, sand and concrete to match surface completion	
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25					
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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B53D **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Tanner Rickard/Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" West of B53**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 2" of asphalt and base	
		ML		CLAYEY SILT (ML), brown (10YR 4/2), damp, stiff, low plasticity, no odor	
		CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), dry, stiff, hard, fine sand, low plasticity, approximately 10% gravel, red oxidation nodules	
5	B53D-5.0				
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B53D

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	~~B53D-10.0~~	CL		SANDY CLAY (CL), dark yellowish brown (10YR 3/6), dry, stiff, hard, fine sand, low plasticity, approximately 10% gravel, red oxidation nodules	
		ML		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, hard, medium plasticity, root dendrites	
		SM		SILTY SAND (SM), light brownish grey (10YR 6/2), dry, loose, fine sand	
		CL		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), dry, stiff, low plasticity, trace gravels	
15	B53D-15.0			Slight increase in coarse sand and gravel traces	
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated granular bentonite, sand and concrete to match surface completion	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B54/SV54 **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Soil vapor probe, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 2" of asphalt and 4" of base underneath	
		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, very stiff, no plasticity, approximately 30% clay, trace fine sand and small gravel, some roots, no odor	
				Decreasing clay conent and increasing gravel and sand	
5					
		SP-SM		SILTY GRAVELLY SAND (SP-SM), brown (10YR 4/3), dry to damp (varying moisture content), fine sand and subangular gravel up to 3/8" in diameter, poorly graded, approximately 10 to 20% silt and 20% gravel, gravel composed of slate and granodiorite, no odor	
				Decreasing gravel content	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B54/SV54

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10				Decreasing gravel content	
		SM		SILTY SAND WITH GRAVEL (SM), yellowish brown (10YR 5/4), dry to damp, fine sand and fine gravel, poorly graded, approximately 20 to 30% silt and less than 10 % gravel, no odor	
15					
				Total depth of boring = 16 ft bgs. Probes set at 08:56 on 6/12/19	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring SV55 **Sheet 1 of 2**

Date(s) Drilled	**11/19 to 11/21/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push, hand auger**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Hand auger, acetate liners**	Hammer Data	**NA**
Borehole Backfill		Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		CL		SILTY CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, medium plasticity,		
5						
10						

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring SV55

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		CL		SILTY CLAY (CL) - dark brown (7.5YR 3/4), damp, firm, medium plasticity		
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B56/SV56 **Sheet 1 of 2**

Date(s) Drilled	**11/19/2018**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Soil vapor probe, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 2" of asphalt and 4" of base underneath	
		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, very stiff, no plasticity, approximately 30% clay, trace fine sand and small gravel, some roots, no odor	
				Decreasing clay content and increasing gravel and sand	
5		SP-SM		SILTY GRAVELLY SAND (SP-SM), brown (10YR 4/3), dry to damp (varying moisture content), fine sand and subangular gravel up to 3/8" in diameter, poorly graded, approximately 10 to 20% silt and 20% gravel, gravel composed of slate and granodiorite, no odor	
				Decreasing gravel content	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B56/SV56

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10				Decreasing gravel content	
		SM		SILTY SAND WITH GRAVEL (SM), yellowish brown (10YR 5/4), dry to damp, fine sand and fine gravel, poorly graded, approximately 20 to 30% silt and less than 10 % gravel, no odor	
15					
				Total depth of boring = 16 ft bgs. Probes set at 08:56 on 6/12/19	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B57/SV57 **Sheet 1 of 2**

Date(s) Drilled	**9/10/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**Southwest corner of parking lot, near Robertson Blvd**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		3-inch thick asphalt no base material		
	48/48	CL		SANDY CLAY (CL) - dark brown (7.5YR 3/4), damp, firm to hard, sand is very fine, none to low plasticity, trace gravels		
5	48/48	SW		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, fine grained with trace gravels to 1.5-inches diameter, poorly graded		
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring B57/SV57

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	SW		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, fine grained with trace gravels to 1.5-inches diameter, poorly graded		
	42/42					
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B57A **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" North of B57**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		SM		SILTY SAND (SM), dark greyish brown (10YR 4/2), dry, loose, fine sand, trace gravels	
				Color change to dark brown (10YR 3/3)	
5	B57A-5.0				Duplicate colllected, B57A-5.0-DUP
		ML		SILTY CLAY (ML), brown (10YR 4/3), dry, very hard, medium plasticity	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B57A

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	~~B57A-10.0~~	ML		SILTY CLAY (ML), brown (10YR 4/3), dry, very hard, medium plasticity	
		GP		Small gravel lense approximately 2" thick	
		SM		SILTY SAND (SM), dark greyish brown (10YR 4/2), dry, loose	
		ML		SILTY CLAY (ML), dark greyish brown (10YR 4/2), dry, stiff, medium plasticity	
15	B57A-15.0				
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated bentonite granules and sand. Completed with concrete to match surface completions.	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B57B **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" East of B57**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		SM		SILTY SAND (SM), dark greyish brown (10YR 4/2), dry, loose, trace gravels	
5	B57B-5.0				Duplicate colllected, B57A-5.0-DUP
		ML		SILTY CLAY (ML), dark brown (10YR 3/3), dry, hard, medium plasticity	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B57B

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	~~B57B-10.0~~	ML		SILTY CLAY (ML), dark brown (10YR 3/3), dry, hard, medium plasticity	
		SM		SILTY SAND (SM), dark brown (10YR 3/2), dry, dense	
		ML		SILTY CLAY (ML), dark brown (10YR 3/2), dry, stiff, medium plasticity	
15	B57B-15.0				
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated bentonite granules and sand. Completed with concrete to match surface completions.	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B57C **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" South of B57**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		CL		SILTY CLAY (CL), dark greyish brown (10R 4/2), dry, stiff, medium plasticity	
		SM		SILTY SAND (SM), dark yellowish brown (10YR 3/4), dry, loose, trace gravels	
5	B57C-5.0				
		ML		SILTY CLAY (ML), dark greyish brown (10YR 4/2), dry, hard, medium plasticity	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B57C

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	B57C-10.0	ML		SILTY CLAY (ML), dark greyish brown (10YR 4/2), dry, hard, medium plasticity	
		SM		SILTY SAND (SM), dark greyish brown (10YR 4/2), dry, loose	
		ML		SILTY CLAY (ML), dark greyish brown (10YR 3/2), dry, soft, medium plasticity	
15	B57C-15.0				
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated bentonite granules and sand. Completed with concrete to match surface completions.	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B57D **Sheet 1 of 2**

Date(s) Drilled	**06/12/2019**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**48" West of B57**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 3" of asphalt and base	
		CL		SANDY CLAY (CL), very dark greyish brown (10YR 3/2), dry, stiff, fine sand, low plasticity, trace gravels	
		ML		SILTY CLAY (ML), brown (10YR 4/3), dry, medium soft, medium plasticity, trace fine sands	
5	B57D-5.0			Coarsening downwards	Duplicate collected, B57D-5.0
		SM		SILTY GRAVELLY SAND (SM), brown (10YR 4/3), damp, fine sand, subrounded/angular gravel up to 1" in diameter, poorly graded, approximately 20% silt and 30% gravel, gravel composed of slate/shale	
		ML		SILTY CLAY (ML), brown (10YR 4/3), dry, stiff, medium plasticity	
10					

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**

Project Number: **S030.008.004**

Log of Boring B57D

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	B57D-10.0	ML		SILTY CLAY (ML), brown (10YR 4/3), dry, stiff, medium plasticity	Duplicate collected, B57D-10.0
				Change in color to dark yellowish brown (10YR 3/4), trace fine sands	
15	B57D-15.0				
				Total depth of boring = 16.0 ft bgs. Boring backfilled with hydrated bentonite granules and sand. Completed with concrete to match surface completions.	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV58 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**North-central portion of school, near west side of arts building**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		3-inch thick asphalt, no base material		
	48/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
		ML		SANDY SILT (ML) - dark brown (7.5YR 3/4), damp, firm, sand is very fine, none to low plasiticity		
5				Increased gravels and cobbles from 5.5-6 feet bgs		
	48/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	48/48	SC		CLAYEY SAND (SC) - dark brown (7.5YR 3/4), damp, dense, very fine to fine grained, poorly graded, none to low plasticity		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV58

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SC		CLAYEY SAND (SC) - dark brown (7.5YR 3/4), damp, dense, very fine to fine grained, poorly graded, none to low plasticity		
	48/48	SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, very fine to fine grained, poorly graded		
	42/42					
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV59 **Sheet 1 of 2**

Date(s) Drilled	**8/31/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**Southwest corner of parking lot, near Robertson Blvd**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		3-inch thick asphalt, no base material		
		SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, fine to medium grained, poorly graded		
	48/48	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm to hard, fine sand, none to low plasiticity		
				4-inch thick gravel and cobble layer at 4.5 feet bgs		
		SM		SILTY SAND (SM) - dark brown (7.5YR 3/4), damp, medium dense, fine to medium grained, poorly graded		
5	48/48					
	48/48					
		CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm to hard, fine sand, none to low plasiticity		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV59

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm to hard, fine sand, none to low plasiticity		
	42/42					
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B60/SV60 **Sheet 1 of 2**

Date(s) Drilled	**11/19/2018**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Soil vapor probe, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 2" of asphalt and 4" of base underneath	
		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, very stiff, no plasticity, approximately 30% clay, trace fine sand and small gravel, some roots, no odor	
				Decreasing clay content and increasing gravel and sand	
5		SP-SM		SILTY GRAVELLY SAND (SP-SM), brown (10YR 4/3), dry to damp (varying moisture content), fine sand and subangular gravel up to 3/8" in diameter, poorly graded, approximately 10 to 20% silt and 20% gravel, gravel composed of slate and granodiorite, no odor	
				Decreasing gravel content	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B60/SV60

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10				Decreasing gravel content	
		SM		SILTY SAND WITH GRAVEL (SM), yellowish brown (10YR 5/4), dry to damp, fine sand and fine gravel, poorly graded, approximately 20 to 30% silt and less than 10 % gravel, no odor	
15					
				Total depth of boring = 16 ft bgs. Probes set at 08:56 on 6/12/19	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B61/SV61 **Sheet 1 of 2**

Date(s) Drilled	**9/10/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**Central portion of school, near east side of laboratory classrooms**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		5-inch thick concrete, no base material		
	48/48	CL		CLAY (CL) - dark brown (7.5YR 3/4), damp, firm to hard, trace fine sand, low plasticity		
5	48/48	SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, fine grained, poorly graded		
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring B61/SV61

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		ML		SANDY SILT (ML) - dark yellowish brown (10YR 3/4), damp, soft to firm, sand is very fine to fine grained, none to low plasticity, sand content varies		
	48/48					
				5-inch thick sand lense		
	42/42					
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B61A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**10.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**Located approximately 32" North of B61**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
				SANDY SILT WITH CLAY (ML), very dark greyish brown, (10YR 4/3), damp, stiff, fine grained sand, no plasticity, approximately 5% clay and 10 to 20% sand, no odor	
				Increasing fine sand content (approximately 30%)	
5				Trace subrounded gravel up to 1/4" in diameter	
				Fining downwards, approximately 10% sand and 20% clay	
10	B61A-10.0			Total depth of boring = 10 ft bgs. Backfilled with hydrated granular bentonite,	

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B61B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**10.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Hydrated granular bentonite and sand, patched to match existing ground surface**	Location	**Located approximately 32" South of B61**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
				SANDY SILT WITH CLAY (ML), very dark greyish brown, (10YR 4/3), damp, stiff, fine grained sand, no plasticity, approximately 5% clay and 10 to 20% sand, no odor	
				Increasing fine sand content (approximately 30%)	
5				Trace subrounded gravel up to 1/4" in diameter	
				Fining downwards, approximately 10% sand and 20% clay	
10	B61B-10.0			Total depth of boring = 10 ft bgs. Backfilled with hydrated granular bentonite,	Duplicate also collected, B61B-10.0-DUP

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B62/SV62 **Sheet 1 of 2**

Date(s) Drilled	**11/19/2018**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger, direct push**	Drill Bit Size/Type	**2.25 inch hand auger, 2.25 inch direct push**	Total Depth of Borehole	**16.0 feet bgs**
Drill Rig Type	**Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger, acetate liner**	Hammer Data	**Not Applicable**
Borehole Backfill	**Soil vapor probe, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt		Approximately 2" of asphalt and 4" of base underneath	
		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, very stiff, no plasticity, approximately 30% clay, trace fine sand and small gravel, some roots, no odor	
				↓ Decreasing clay content and increasing gravel and sand	
5					
		SP-SM		SILTY GRAVELLY SAND (SP-SM), brown (10YR 4/3), dry to damp, fine sand and subangular gravel up to 3/8" in diameter, poorly graded, approximately 10 to 20% silt and 20% gravel, gravel composed of slate and granodiorite, no odor	
				↓ Decreasing gravel content	
10					

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**
Project Number: **S030.008.004**

Log of Boring B62/SV62

Sheet 2 of 2

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10				Decreasing gravel content	
		SM		SILTY SAND WITH GRAVEL (SM), yellowish brown (10YR 5/4), dry to damp, fine sand and fine gravel, poorly graded, approximately 20 to 30% silt and less than 10 % gravel, no odor	
15					
				Total depth of boring = 16 ft bgs. Probes set at 08:56 on 6/12/19	
20					
25					
30					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B63 **Sheet 1 of 1**

Date(s) Drilled	**09/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B63-0.5	Concrete			
		SM		SILTY SAND (SM), light brown, dry, well graded, trace gravel composed of shale	
	B63-1.5				
	B63-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV63 **Sheet 1 of 2**

Date(s) Drilled	**9/19/2018**	Logged By	**Daniel Phepls**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.25-inch rods**	Total Depth of Borehole	**29.5 feet bgs**
Drill Rig Type	**6620 DT track mounted Geoprobe**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Backfill with native and patched to match existing ground surface**	Location	**Central portion of school, west of laboratory classrooms, surface elevation approximately 14 feet above grade of adjacent laboratory building basement floor**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		8-inch thick concrete, no base material		
	36/48	SM		SILTY SAND (SM) (FILL) with clay - dark yellowish brown (10YR 4/4), damp, loose to medium dense, density increases with depth, very fine to fine grained, poorly graded, trace fines		
5	36/48					
	36/48					
10						

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**
Project Number: **S00.008.004**

Log of Boring SV63

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SM		SILTY SAND (SM) (FILL) with clay - dark yellowish brown (10YR 4/4), damp, loose to medium dense, density increases with depth, very fine to fine grained, poorly graded, trace fines		
	36/48					
	36/48					
15				Increase in angular 0.5-inch gravels, becomes grayish brown (10YR 5/2)		
	48/48					
20				Scattered pieces of red brick		
	36/48					
				Mottled iron oxide coloration, decrease in fines		
25						
	36/48					
		SW		SAND (SW) - light yellowish brown, damp, medium dense, fine to coarse grained, trace subangular to subrounded gravels up to 0.5-inch, well graded		
	18/18					
30				Total Depth = 29.5 feet bgs		

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring B65/SV65 **Sheet 1 of 2**

Date(s) Drilled	**9/10/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct push**	Drill Bit Size/Type	**2.25-inch**	Total Depth of Borehole	**15.5 feet bgs**
Drill Rig Type	**Truck mtd. Geoprobe 5400**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate liners**	Hammer Data	**NA**
Borehole Backfill	**Hydrated bentonite and patched to match existing ground surface**	Location	**Southeast-central portion of school, near south side of laboratory classrooms**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Asphalt		3-inch pavers		
		SW		GRAVELLY SAND (SW) (BASE MATERIAL) - light gray (5YR 7/1), dry, medium dense, sand is fine to medium grained, gravels to 2-inches diameter		
	48/48	CL		SANDY CLAY (CL) - dark brown (7.5YR 3/3), damp, hard, sand is very fine, none to low plasiticity		
5	48/48	SM		SILTY SAND (SM) - dark yellowish brown (10YR 3/4), damp, medium dense, fine grained, poorly graded, laminar beds		
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**
Project Number: **S00.008.004**

Log of Boring B65/SV65

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SM		Increased clay content from 9-11 feet bgs		
	48/48					
	42/42					
15				Total Depth = 15.5 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B66 **Sheet 1 of 1**

Date(s) Drilled	**09/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B66-0.5	SM		SILTY SAND (SM), light brown, dry, trace gravel composed of slate, low plasticity fines	
	B66-1.5				
	B66-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B67 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		CL		SILTY CLAY (CL), dark brown, damp, medium plasticity	
	B67-0.5				
	B67-1.5				
	B67-2.5				
				Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B68 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Central portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B68-0.5	SC		CLAYEY SAND (SC), dark brown, moist, fine to medium grained, poorly graded, clay has low plasticity	
	B68-1.5	CL		SANDY CLAY (CL), dark brown, moist, fine grained sand, low plasticity Cobble at 2.0 feet bgs and gravel ~1 to 2 inches in diameter	
	B68-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B69 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Fill		Topsoil from planter	
	B69-0.5	CL		SILTY CLAY (CL), brown to black, damp, trace sand and gravel, medium plasticity	
	B69-1.5				
	B69-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B70 **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" north of B70**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B70-0.5 B70-1.5 B70-2.5	SM		SILTY SAND (SM), light yellowish brown (10YR 6/4), dry, loose, poorly graded, trace gravel	
				Total depth of boring = 1.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B70A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" north of B70**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		SM		SILTY SAND (SM), light yellowish brown (10YR 6/4), dry, loose, poorly graded, trace gravel	
				Total depth of boring = 1.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B70B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" south of B70**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		SM		SILTY SAND (SM), light yellowish brown (10YR 6/4), dry, loose, poorly graded, trace gravel	
				Total depth of boring = 1.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B71 **Sheet 1 of 1**

Date(s) Drilled	**09/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**1.0 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B71-0.5	SM		SILTY SAND (SM), light brown, dry, poorly graded, trace gravel	
				Total Depth = 1.0 feet bgs, hit concrete footing	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B72 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location	**Central portion of school**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Asphalt			
		Fill		BASE	
	B72-0.5	CL		SANDY CLAY (CL), dark brown, dry to damp, soft to firm, fine to medium grained sand, low plasticity	
	B72-1.5				
	B72-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B73 **Sheet 1 of 1**

Date(s) Drilled	**09/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B73-0.5	SP		GRAVELLY SAND (SP), grey, dry, well graded	
	B73-1.5	CL		CLAY (CL), dark brown to black, high plasticity	
	B73-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B74 **Sheet 1 of 1**

Date(s) Drilled	**09/19/2018**	Logged By	**Wes Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		Concrete			
	B74-0.5	SM		SILTY SAND, light brown, dry, poorly graded	
	B74-1.5	CL		SILTY CLAY (CL) dark brown, damp, medium plasticity	
	B74-2.5			Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B79 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B79-0.5		Grass		Approximately 3 inches of grass and sod/potting soil	Duplicate collected, B79-0.5-DUP
			B79-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B79-2.5		ML		SILTY CLAY (CL), dark greyish brown (10YR 3/2), damp, very stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B80 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B80-0.5		Grass		Approximately 3 inches of grass and sod/potting soil	
			B80-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B80-2.5		ML		SILTY CLAY (CL), dark greyish brown (10YR 3/2), damp, very stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B81 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B81-0.5		Grass		Approximately 2 inches of grass and sod/potting soil	Duplicate collected, B81-0.5-DUP
			B81-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B81-2.5		ML		SILTY CLAY (CL), dark greyish brown (10YR 3/2), damp, very stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B82 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B82-0.5		Grass		Approximately 2 inches of grass and sod/potting soil	
			B82-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B82-2.5		ML		SILTY CLAY (CL), dark greyish brown (10YR 3/2), damp, very stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B83 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B83-0.5		Fill		Approximately 3 to 4 inches of play sand (baseball field)	Duplicate collected, B83-0.5-DUP
			B83-1.5		CL		SILTY CLAY (CL), very dark brown (10YR 3/2), damp, soft, medium plasticity	
			B83-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B84 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B84-0.5		Grass		Approximately 2 inches of sod/potting soil	
			B84-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B84-2.5		ML		SILTY CLAY (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B85 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B85-0.5		Grass		Approximately 3 inches of sod/potting soil	Duplicate collected, B85-0.5-DUP
			B85-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B85-2.5		ML		SILTY CLAY (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B86 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B86-0.5		Grass		Approximately 3 inches of sod/potting soil	
			B86-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B86-2.5		ML		SILTY CLAY (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B90 **Sheet 1 of 1**

Date(s) Drilled	**10/20/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0				SM		SILTY SAND, brown, 10YR 3/3, dry, fine sand, poorly graded	
							Bottom of boring at 2.5 feet bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B91 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B91-0.5 B91-1.5 B91-2.5	SM		SILTY SAND (SM), dark yellowish brown, dry to damp, fine to medium grained, poorly graded, roots	
				Total Depth = 2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B91A **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**36" north of B91**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		GP-GM		Gravel base	
		SM		SILTY SAND (SM), brown (10YR 3/3), damp, loose, fine sands and trace gravel, poorly graded	
	B91A-1.5			Total depth of boring = 1.5 ft bgs	Duplicate collected, B91A-1.5-DUP
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B91B **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**94" south of B91**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B91B-1.5	GP-GM		Gravel base	
		SM		SILTY SAND (SM), brown (10YR 3/3), damp, loose, fine sands and trace gravel, poorly graded	
				Total depth of boring = 1.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B91C **Sheet 1 of 1**

Date(s) Drilled	**06/13/2019**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand auger**	Drill Bit Size/Type	**3.25 inch hand auger**	Total Depth of Borehole	**1.5 feet bgs**
Drill Rig Type	**Hand auger**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand auger**	Hammer Data	**Not Applicable**
Borehole Backfill	**Sand, patched to match existing ground surface**	Location	**40" west of B91**		

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		GP-GM		Gravel base	
		SM		SILTY SAND (SM), brown (10YR 3/3), damp, loose, fine sands and trace gravel, poorly graded	
	B91C-1.5			Total depth of boring = 1.5 ft bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B92 **Sheet 1 of 1**

Date(s) Drilled	**10/20/2018**	Logged By	**Daniel Phelps**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**3-Inch Hand Auger**	Total Depth of Borehole	**2.5 feet bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm Environmental Field Services**	Approximate Surface Elevation	**~125 feet amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Native backfill, patched to match existing ground surface**	Location			

Depth (feet)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0	B92-0.5	SM		SILTY SAND (SM) - dark yellowish brown, dry to damp, fine to medium grained sand, poorly graded, roots	Duplicate sample: B92-0.5-DUP
	B92-1.5				Duplicate sample: B92-1.5-DUP
	B92-2.5				Duplicate sample: B92-2.5-DUP
				Total Depth =2.5 feet bgs	
5					
10					

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B93 **Sheet 1 of 1**

Date(s) Drilled	**10/20/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0				SM		SILTY SAND, brown, 10YR 3/3, dry, fine sand, poorly graded	
							Bottom of boring at 2.5 feet bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B94 **Sheet 1 of 1**

Date(s) Drilled	**6/13/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B94-0.5		Asphalt		Approximately 3 inches of asphalt	
			B94-1.5		ML		CLAYEY SILT (ML), very dark grey (10YR 3/1), damp, stiff, medium plasticity	
			B94-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B95 **Sheet 1 of 1**

Date(s) Drilled	**6/13/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B95-0.5		Asphalt		Approximately 3 inches of asphalt	
			B95-1.5		ML		CLAYEY SILT (ML), very dark grey (10YR 3/1), damp, stiff, medium plasticity	
			B95-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B96 **Sheet 1 of 1**

Date(s) Drilled	**6/13/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B96-0.5		Asphalt		Approximately 3 inches of asphalt	
			B96-1.5		ML		CLAYEY SILT (ML), very dark grey (10YR 3/1), damp, stiff, medium plasticity	
			B96-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B97 **Sheet 1 of 1**

Date(s) Drilled	**6/13/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B97-0.5		ML		CLAYEY SILT (ML), very dark grey (10YR 3/1), damp, stiff, medium plasticity	
			B97-1.5					
			B97-2.5					
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B98 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B98-0.5		Asphalt		Approximately 3 inches of asphalt	
					Fill		Approximately 3 inches of base material	
			B98-1.5		ML		CLAYEY SILT (CL), very dark grey (10YR 3/1), damp, very hard, medium plasticity	
			B98-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B99 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B99-0.5		Asphalt		Approximately 3 inches of asphalt	
					Fill		Approximately 3 inches of base material	
			B99-1.5		ML		CLAYEY SILT(ML), very dark greyish brown (10YR 3/2), damp, very hard, medium plasticity	
			B99-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B100 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B100-0.5		Asphalt		Approximately 3 inches of asphalt	
					Fill		Approximately 3 inches of base material	
			B100-1.5		ML		CLAYEY SILT (ML), brown (10YR 3/3), dry, stiff, medium plasticity	
			B100-2.5				Change in color to very dark greyish brown (10YR 3/1) and change in moisture from dry to damp	
	5						Total Depth of Boring = 2.5 ft bgs	
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B101 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B101-0.5		Asphalt		Approximately 3 inches of asphalt	Duplicate collected, B101-0.5-DUP
					Fill		Approximately 3 inches of base material	
			B101-1.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), dry, hard, medium plasticity, trace gravel and red oxidation nodules	
			B101-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B102 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B102-0.5		Asphalt		Approximately 3 inches of asphalt	Duplicate collected, B102-0.5-DUP
					Fill		Approximately 3 inches of base material	
			B102-1.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity, trace gravel	
			B102-2.5				Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B103 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B103-0.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B103-1.5					
			B103-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B104 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B104-0.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B104-1.5					
			B104-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B105 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B105-0.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, medium sand, poorly graded	
			B105-1.5					
			B105-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity, hard, trace gravel	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B106 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B106-0.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B106-1.5					
			B106-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B107 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B107-0.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B107-1.5					
			B107-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B108 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B108-0.5		Grass		Approximately 3 inches of sod/potting soil	
			B108-1.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B108-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity, trace gravel	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd., Los Angeles, CA** Project Number: **S030.008.004**	Log of Boring B109 **Sheet 1 of 1**

Date(s) Drilled	**6/14/19**	Logged By	**Wes Skillings/Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Hand Auger**	Drill Bit Size/Type	**4-inch hand auger**	Total Depth of Borehole	**2.5 ft bgs**
Drill Rig Type	**Not Applicable**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**~125 ft amsl**
Groundwater Level and Date Measured	**Not Encountered**	Sampling Method(s)	**Hand Auger**	Hammer Data	
Borehole Backfill	**Sand, patched at surface to match existing completion**	Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0		B109-0.5		SM		SILTY SAND (SM), yellowish brown (10YR 5/4), dry, loose, fine sand, poorly graded	
			B109-1.5					
			B109-2.5		ML		CLAYEY SILT (ML), very dark greyish brown (10YR 3/2), damp, stiff, medium plasticity	
							Total Depth of Boring = 2.5 ft bgs	
	5							
	10							
	15							
	20							
	25							
	30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV110 **Sheet 1 of 2**

Date(s) Drilled **6/11/19**	Logged By **Tanner Rickard**	Checked By **Clare Steedman, PG**
Drilling Method **Direct Push**	Drill Bit Size/Type **2.75" HA, 2.25" DP**	Total Depth of Borehole **16 feet**
Drill Rig Type **Truck mtd., Geoprobe 540**	Drilling Contractor **Strongarm Enviornmental**	Approximate Surface Elevation **~ 125 feet msl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s)	Hammer Data **NA**
Borehole Backfill **Bentonite Grout**	Location **Planter Near Humanities Bldg**	

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0	60/60	Concrete		Brick		
		Fill		Fill sand with gravels		
		ML		Sandy Silt, very dark greyish brown, 10YR 3/2, damp, medium stiff, fine sand, no plasticity, (0% gravel, 20% sand, 80% fines), no odor	Hydrated #8	
		CL		Silty Clay, dark greyish brown, 10YR 4/2, damp, medium stiff, medium plasticity, no odor, (0% gravel, 0% sand, 100% fines)	Dry #8	
					#3 Sand	
5	36/36				Vapor Probe	
					Hydrated #8	
	48/48					
		SM		Silty Sand, yellowish brown, 10YR 5/4, damp, fine sand, poorly graded, fines with depth		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV110

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	SM		Silty Sand, yellowish brown, 10YR 5/4, damp, fine sand, poorly graded, fines with depth		
		ML		Clayey Silt, yellowish brown 10YR 5/4, damp, stiff, trace fine sand, low plasticity, no odor, coarsens with depth		
		SM		Silty Sand, yellowish brown, 10YR 5/4, moist, fine sand, poorly graded, fines with depth	Dry #8	
15		ML		Clayey SIlt, yellowish brown, 10YR 5/4, damp, stiff, low plasticity, no odor	#3 Sand Vapor Probe	
				Bottom of boring at 16ft bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV111 **Sheet 1 of 2**

Date(s) Drilled	**6/11/19**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location	**Planter Near Humanities Bldg**		

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Brick		
		CL		SILTY CLAY, dark greyish brown, 10YR 4/2, damp, trace fine sand, low plasticity, (0% Gravel, 5%Sand, 95% fines)	hand auger to 5 feet Hydrated #8 Dry #8	
		ML		CLAYEY SILT, Dark Yellowish Brown, 10YR 3/6, Damp, Medium Stiff, Low Plasticity, Trace Fine Gravel, Subrounded, No Odor, (10% Gravel, 5% Sand, 85% Fines)	#3 Sand Vapor Probe Hydrated #8	
5	36/36					
				Strong Brown Color Change		
	48/48					
		CL		SILTY CLAY, Dark Yellowish Brown, 10YR 3/6, damp, stiff, low plasticity, (0, 0, 100)		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV111

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	CL		SILTY CLAY, Dark Yellowish Brown, 10YR 3/6, damp, stiff, low plasticity, (0, 0, 100)		
		SM		SILTY SAND, dark yellowish brown, 10YR 3/6, damp, fine to medium sand, poorly graded, no odor, (0, 80, 20)	Dry #8	
15		ML		CLAYEY SILT, brown, 10YR 4/3, stiff, low plasticity, no odor, (0, 0, 100)	# 3 Sand Vapor Probe	
				Bottom of boring at 16 feet		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV112 **Sheet 1 of 2**

Date(s) Drilled	**6/12/19**	Logged By	**Tanner Rickard**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Concrete		
		ML		CLAYEY SANDY SILT, very dark greyish brown, 2.5Y 3/2, damp, stiff, fine sand, low plasticity, (0% gravel, 20% sand, 80% fines)	hand auger to 5 feet hydrated #8	
				traces fine gravels, 1/2 inch diameter, sub rounded	dry #8	
					#3 sand	
5	36/36				vapor probe hydrated #8	
	48/48	SP		GRAVELLY SAND, brown, 10YR 4/3, damp, fine to coarse sand, fine gravel, moderately graded, trace fines, (20, 70, 10)		
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV112

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	SP		GRAVELLY SAND, brown, 10YR 4/3, damp, fine to coarse sand, fine gravel, moderately graded, trace fines, (20, 70, 10)		
				decrease in gravel content to 10%, fine sand content increase to 80%	dry #8	
15					#3 sand vapor probe	
				Bottom of boring at 16 bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV113 **Sheet 1 of 2**

Date(s) Drilled	**8/12/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**16 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt		
		SM		SILTY SAND, dark greyish brown, 10YR 4/3, damp, fine sand, poorly graded, (0% gravel, 80% sand, 20% fines)	hand auger to 5 feet hydrated #8	
		ML		SILT, brown, 10YR 4/3, damp, stiff, low plasticity, trace fine sands, (0, 5, 95)	dry #8	
					#3 sand	
5	36/36			trace fine gravel and increase in fine sands (5, 10, 85)	vapor probe hydrated #8	
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV113

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10				trace fine gravel and increase in fine sands (5, 10, 85)		
	48/48					
					dry #8	
					#3 sand	
15		SW		SILTY SAND, pale brown 10YR 6/3, damp, medium sand, poorly graded, (0, 90, 10)	vapor probe	
				Bottom of boring at 16 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV114 **Sheet 1 of 2**

Date(s) Drilled	**8/12/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt	hand auger to 5 feet	
		SM		SILTY SAND, dark greyish brown, 10YR 4/2, damp, fine sand, poorly graded, (0% gravel, 80% sand, 20% fines)	hydrated #8	
					dry #8	
					#3 sand	
5	36/36	ML		SILT, brown, 10YR 4/3, damp, stiff, low plasticity, trace fine sands, (0, 5, 95)	vapor probe	
					hydrated #8	
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV114

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SM		SILTY SAND, dark greyish brown 10YR 4/2, damp, medium sand, poorly graded, (0, 85, 15),		
		SM-ML				
	48/48			Interbedded silty sand and silt layers, 3-4 inches thick, 15.5 feet probe construction was in sand		
					dry #8	
					#3 sand	
15					vapor probe	
				Bottom of boring at 16 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV115 **Sheet 1 of 2**

Date(s) Drilled **8/12/19**	Logged By **West Skillings**	Checked By **Clare Steedman, PG**
Drilling Method **Direct Push**	Drill Bit Size/Type **2.75" HA, 2.25" DP**	Total Depth of Borehole **16 feet**
Drill Rig Type **Truck mtd., Geoprobe 540**	Drilling Contractor **Strongarm Enviornmental**	Approximate Surface Elevation **~ 125 feet msl**
Groundwater Level and Date Measured **Not encountered**	Sampling Method(s)	Hammer Data **NA**
Borehole Backfill **Bentonite Grout**	Location	

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt		
		SM		SILTY SAND, dark greyish brown, 10YR 4/2, damp, fine sand, poorly graded, (0% gravel, 80% sand, 20% fines)	hand auger to 5 feet hydrated #8	
		ML		SILT, dark greyish brown, 10YR 4/2, damp, stiff, low plasticity, trace fine sands, (0, 5, 95)		
				Trace gravel increase in fine sand (5, 10, 85)		
					dry #8	
					#3 sand	
5	36/36				vapor probe hydrated #8	
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV115

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10				Trace gravel increase in fine sand (5, 10, 85)		
	48/48					
					dry #8	
					#3 sand	
15		SM		SILTY SAND, dark grayish brown 10YR 4/2, damp, medium sand, poorly graded, (0, 90, 10)	vapor probe	
				Bottom of boring at 16 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV116 **Sheet 1 of 2**

Date(s) Drilled	**8/12/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0		Concrete		Asphalt		
		SM		SILTY SAND, dark greyish brown, 10YR 4/2, damp, fine sand, poorly graded, (0% gravel, 80% sand, 20% fines)	hand auger to 5 feet hydrated #8 dry #8 #3 sand	
5	36/36	ML		SILT, brown, 10YR 4/3, damp, stiff, low plasticity, trace fine sands, (0, 5, 95)	vapor probe hydrated #8	
	48/48					
10						

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV116

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10	48/48	ML		SILT, brown, 10YR 4/3, damp, stiff, low plasticity, trace fine sands, (0, 5, 95)		
		SM		SILTY SAND, dark greyish brown 10YR 4/2, damp, medium sand, poorly graded, (0, 90, 10),	dry #8 #3 sand vapor probe	
15				Bottom of boring at 16 feet bgs		
20						
25						
30						

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**
Project Number: **S00.008.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
1	2	3	4	5	6	7

COLUMN DESCRIPTIONS

1. Depth (feet): Depth in feet below the ground surface.
2. Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
3. USCS Symbol: Type of material encountered.
4. Graphic Log: Graphic depiction of the subsurface material encountered.
5. MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
6. REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.
7. Soil Vapor Probes Construction Log: Graphical representation of well installed upon completion of drilling and sampling.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

- Asphaltic Concrete (AC)
- Bentonite chips
- Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
- Portland Cement Concrete
- AF
- Silty GRAVEL (GM)
- SILT, SILT w/SAND, SANDY SILT (ML)
- Clayey SAND (SC)
- Silty SAND (SM)
- Silty SAND to Sandy SILT (SM-ML)
- Poorly graded SAND (SP)
- Well graded SAND (SW)

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Auger sampler
- Bulk Sample
- 3-inch-OD California w/ brass rings
- CME Sampler
- Grab Sample
- 2.5-inch-OD Modified California w/ brass liners
- Pitcher Sample
- 2-inch-OD unlined split spoon (SPT)
- Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

- Water level (at time of drilling, ATD)
- Water level (after waiting)
- Minor change in material properties within a stratum
- Inferred/gradational contact between strata
- Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd., Los Angeles, CA**

Project Number: **S030.008.004**

Key to Log of Boring

Sheet 1 of 1

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9

COLUMN DESCRIPTIONS

1 Elevation (feet): Elevation (MSL, feet).
2 Depth (feet): Depth in feet below the ground surface.
3 Sample Type: Type of soil sample collected at the depth interval shown.
4 Sample Number: Sample identification number.
5 Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
6 Material Type: Type of material encountered.
7 Graphic Log: Graphic depiction of the subsurface material encountered.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
AF
Grass and/or topsoil
SILT, SILT w/SAND, SANDY SILT (ML)
Silty SAND (SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV117 **Sheet 1 of 2**

Date(s) Drilled	**11/23/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0			Asphalt			Hand auger to 5 feet	
			ML		SILT, very dark greyish brown, 10YR 3/2, damp, stiff, fine sand, no plasticity, (0% gravel, 5% sand, 95% fines)	Hydrated #8	
						Dry #8	
5		SV117-5.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30)	Vapor Probe	
	36/36					Dry#8	
10						Vapor Probe	

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV117

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SV117-10.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30)	Vapor Probe	
			SP		SAND, 10YR 4/3, brown, damp, medium and fine sand, poorly graded (0, 90, 10)		
	48/48						
						Dry #8	
15		SV117-15.0				Vapor Probe	
	48/48						
			SP		GRAVELLY SAND, very dark greyish brown, 10YR 3/2, damp, medium sand and fine gravel, moderately graded, (15, 80, 5)		
20	48/48						
						Dry #8	
	12/12						
25		SV117-25.0				Vapor Probe	
					Bottom of boring at 26.0 feet		
30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV118 **Sheet 1 of 2**

Date(s) Drilled	**11/23/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0			Asphalt			Hand auger to 5 feet	
			ML		SILT, very dark greyish brown, 10YR 3/2, damp, stiff, fine sand, no plasticity, (0% gravel, 5% sand, 95% fines)	Hydrated #8	
						Dry #8	
5		SV118-5.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30), 1-2 cm trace angular shale fragments, 1-2cm trace sub-angular quarts fragments, 3mm red oxidation nodules	Vapor Probe	
	36/36					Dry#8	
10						Vapor Probe	

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV118

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SV118-10.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30), 1-2 cm trace angular shale fragments, 1-2cm trace sub-angular quarts fragments, 3mm red oxidation nodules	Vapor Probe	
			SP		SAND, 10YR 4/3, brown, damp, medium and fine sand, poorly graded (0, 90, 10)		
	48/48						
						Dry #8	
15		SV118-15.0				Vapor Probe	
	48/48						
			SP		GRAVELLY SAND, very dark greyish brown, 10YR 3/2, damp, medium sand and fine gravel, moderately graded, (15, 80, 5), interbedded with 4 inch fine gravel layer at 21 feet		
20	48/48						
						Dry #8	
	12/12						
25		SV118-25.0				Vapor Probe	
					Bottom of boring at 26.0 feet		
30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV119 **Sheet 1 of 2**

Date(s) Drilled	**8/12/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0			Asphalt			Hand auger to 5 feet	
			ML		SILT, very dark greyish brown, 10YR 3/2, damp, stiff, fine sand, no plasticity, (0% gravel, 5% sand, 95% fines)	Hydrated #8	
						Dry #8	
5		SV119-5.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, 1-2 cm trace angular shale fragments, 1-2cm trace sub-angular quarts fragments, 3mm red oxidation nodules, (0, 70, 30),	Vapor Probe	
	36/36					Dry#8	
10						Vapor Probe	

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Log of Boring SV119

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SV119-10.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, 1-2 cm trace angular shale fragments, 1-2cm trace sub-angular quarts fragments, 3mm red oxidation nodules, (0, 70, 30)	Vapor Probe	
	48/48						
						Dry #8	
					Increase in medium sand content, coarsens with depth		
15		SV119-15.0				Vapor Probe	
	48/48						
			SP		GRAVELLY SAND, very dark greyish brown, 10YR 3/2, damp, medium sand and fine gravel, moderately graded, interbedded with 4 inch fine gravel layer at 21 feet		
20	48/48						
						Dry #8	
	12/12						
25		SV119-25.0				Vapor Probe	
					Bottom of boring at 25.5 feet		
30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV120 **Sheet 1 of 2**

Date(s) Drilled	**11/23/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0			Asphalt			Hand auger to 5 feet	
			ML		SILT, very dark greyish brown, 10YR 3/2, damp, stiff, fine sand, no plasticity, (0% gravel, 5% sand, 95% fines)	Hydrated #8	
						Dry #8	
5		SV120-5.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30)	Vapor Probe	
	36/36					Dry#8	
10						Vapor Probe	

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**
Project Number: **S00.008.004**

Log of Boring SV120

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
10		SV120-10.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30)	Vapor Probe	
	48/48						
						Dry #8	
					Increase in medium sand content, coarsens with depth		
15		SV120-15.0				Vapor Probe	
	48/48						
			SP		GRAVELLY SAND, very dark greyish brown, 10YR 3/2, damp, medium sand and fine gravel, moderately graded		
20	48/48						
						Dry #8	
	12/12						
25		SV120-25.0				Vapor Probe	
					Bottom of boring at 25.5 feet		
30							

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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV121 **Sheet 1 of 2**

Date(s) Drilled	**11/23/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0			Asphalt			Hand auger to 5 feet	
			ML		SILT, very dark greyish brown, 10YR 3/2, damp, stiff, fine sand, no plasticity, (0% gravel, 5% sand, 95% fines)	Hydrated #8	
						Dry #8	
5		SV121-5.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30), 1-2 cm trace angular shale fragments, 1-2cm trace sub-angular quarts fragments, 3mm red oxidation nodules	Vapor Probe	
	36/36					Dry#8	
10						Vapor Probe	

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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

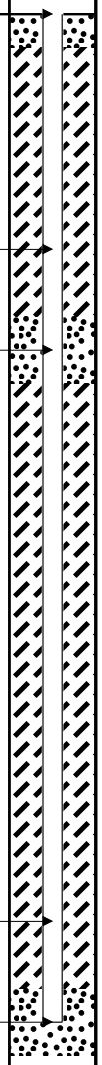
Project Number: **S00.008.004**

Log of Boring SV121

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		SV121-10.0	ML		SILT, very dark greyish brown, 10YR 4/3, damp, stiff, fine sand, no plasticity	Vapor Probe
	48/48					
			SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded (0, 70, 30)	Dry #8
15		SV121-15.0				Vapor Probe
	48/48					
20	48/48					
			SP		GRAVELLY SAND, very dark greyish brown, 10YR 3/2, damp, medium sand and fine gravel, moderately graded, (15, 80, 5),	Dry #8
	12/12					
25		SV121-25.0				Vapor Probe
					Bottom of boring at 26.0 feet	
30						

Soil Vapor Probes Construction Log



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Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Blvd, Los Angeles, CA** Project Number: **S00.008.004**	Log of Boring SV122 **Sheet 1 of 2**

Date(s) Drilled	**11/23/19**	Logged By	**West Skillings**	Checked By	**Clare Steedman**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2.75" HA, 2.25" DP**	Total Depth of Borehole	**15.5 feet**
Drill Rig Type	**Truck mtd., Geoprobe 540**	Drilling Contractor	**Strongarm Enviornmental**	Approximate Surface Elevation	**~ 125 feet msl**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)		Hammer Data	**NA**
Borehole Backfill	**Bentonite Grout**	Location			

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
0			Asphalt			Hand auger to 5 feet	
			ML		SILT, very dark greyish brown, 10YR 3/2, damp, stiff, fine sand, no plasticity, (0% gravel, 5% sand, 95% fines)	Hydrated #8	
						Dry #8	
5		SV122-5.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded, (0, 70, 30), 1-2 cm trace angular shale fragments, 1-2cm trace sub-angular quarts fragments, 3mm red oxidation nodules	Vapor Probe	
	36/36					Dry#8	
10						Vapor Probe	

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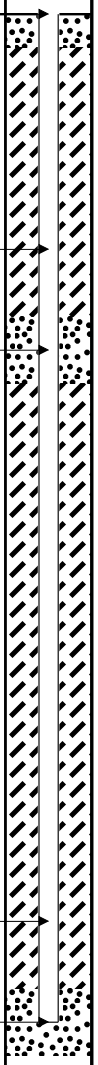
Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**
Project Number: **S00.008.004**

Log of Boring SV122

Sheet 2 of 2

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10	48/48	SV122-10.0	ML		SILT, very dark greyish brown, 10YR 4/3, damp, stiff, fine sand, no plasticity	Vapor Probe
15	48/48	SV122-15.0	SM		SILTY SAND, 10YR 4/3, brown, damp, fine sand, poorly graded (0, 70, 30)	Dry #8 Vapor Probe
20	48/48					
25	12/12	SV122-25.0	SP		GRAVELLY SAND, very dark greyish brown, 10YR 3/2, damp, medium sand and fine gravel, moderately graded, (15, 80, 5),	Dry #8 Vapor Probe
30					Bottom of boring at 26.0 feet	

Soil Vapor Probes Construction Log



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Project: **Alexander Hamilton Senior High School**

Project Location: **2955 S. Robertson Blvd, Los Angeles, CA**

Project Number: **S00.008.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Recovered (in) / Total (in)	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	Soil Vapor Probes Construction Log
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
3 Sample Number: Sample identification number.
4 USCS Symbol: Type of material encountered.
5 Graphic Log: Graphic depiction of the subsurface material encountered.
6 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
7 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.
8 Soil Vapor Probes Construction Log: Graphical representation of well installed upon completion of drilling and sampling.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Bentonite chips
SILT, SILT w/SAND, SANDY SILT (ML)
Silty SAND (SM)
Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB01 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**T. Rickard**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt			
		AB01-1.0		CL		SILTY GRAVELLY CLAY, brown; moist, ~10 to 15% subangular to rounded gravel up to 0.5" in diameter, stiff to very stiff, low to medium plasticity	Top 5 feet hand augered
				CL		SILTY CLAY, dark brown, moist, ~10 to 15% silt, stiff, low plasticity, no odor,	
5		AB01-5.0					
			36"/36"				
			28"/48"			Trace mica	
10							

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Figure 1

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB01

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB01-10.0	28"/48"			Trace mica	
			24"/48"	SC		CLAYEY SAND, light tan brown, moist, fine sand poorly graded, ~25 to 35% clay, no odor Fining downwards	
15		AB01-15.0		CL		CLAY (CL), brown, moist, trace silt, medium plasticity, no odor	
			30"/48"	SM		SILTY SAND (SM), light tan brown, trace micas, no odor	
20		AB01-20.0		SM-SC		SILTY CLAYEY SAND (SM-SC), mottled light brown/gray, moist, no odor	
			30"/48"	SW		GRAVELLY SAND (SW), grey to tan/brown, very fine to coarse sand, ~30 to 40% rounded gravel up to 3/8" in diameter	
25		AB01-25.0	36"/48"			Red/brown iron oxide staining	
				SP		SAND (SP), tan, dry, very fine to fine sand, very loose	
			24"/24"	SW		GRAVELLY SAND (SW), grey to tan/brown, very fine to coarse sand, ~30 to 40% rounded gravel up to 3/8" in diameter	
30						Total depth of boring = 30.0 ft bgs	

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Figure 1

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Clayey SAND (SC)
Silty SAND (SM)
Silty to Clayey SAND (SM-SC)
Poorly graded SAND (SP)
Well graded SAND (SW)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB02 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**T. Rickard**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0		AB02-1.0		CL		SILTY CLAY (CL), brown, moist, trace gravel, stiff low plasticity, no odor	Top 5 feet hand augered
5		AB02-5.0	28"/36"	CL		CLAY (CL), dark brown, moist, very stiff, medium plasticity, no odor	
			48"/48"	CL		SANDY CLAY (CL), brown, moist, ~15 to 20% sand, low plasticity, no odor	
10							

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Figure 2

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB02

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB02-10.0	48"/48"	CL		SANDY CLAY (CL), brown, moist, ~15 to 20% sand, low plasticity, no odor	
			48"/48"	SC-CL		SANDY CLAY (CL), brown, moist, fine sand, ~20 to 40% sand, medium plasticity, medium stiff, no odor	
15		AB02-15.0	48"/48"			1" shale gravel piece	
						~20% silt	
20		AB02-20.0	36"/48"	SP		GRAVELLY SAND (SP), grey-red-brown, very dense, fine to coarse grained sand, shale/granitic gravel up to 3/8"	
25		AB02-25.0	36"/48"				
		AB02-29.0	12"/12"			Total depth of boring = 29 feet bgs, refusal encountered	
30							

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Figure 2

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Clayey SAND to Sandy CLAY (SC-CL)
Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
CME Sampler
Pitcher Sample
Bulk Sample
Grab Sample
2-inch-OD unlined split spoon (SPT)
3-inch-OD California w/ brass rings
2.5-inch-OD Modified California w/ brass liners
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB03 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**T. Rickard**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				CL		SILTY CLAY (CL), dark brown, moist, trace gravel low plasticity, no odor	Top 5 feet hand augered
		AB03-1.0					
						No gravel	
5		AB03-5.0					
			26"/36"				
				CL		SANDY CLAY (CL), brown, medium to coarse sand, medium stiff, ~20 to 40% sand, low plasticity	
			39"/48"				
10							

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Figure 3

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB03

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB03-10.0	39"/48"	CL		SANDY CLAY (CL), brown, medium to coarse sand, medium stiff, ~20 to 40% sand, low plasticity	
			35"/48"	SC-CL		Interbedded clays and sands	
15		AB03-15.0				1" shale layer	
			41"/48"	SC		SANDY CLAY (CL), mottled grey/light brown; moist, fine sand, ~5 to 10% silt; ~30% fine sand, medium plasticity	
20		AB03-20.0					
			40"/48"	SW		GRAVELLY SAND (SW), brown to grey, moist coarse to very coarse sand, sub-rounded gravel up to 3/8"	
25		AB03-25.0					
			42"/48"	SP		SAND (SP), dark grey to black, fine sand, trace mica	
				SW		GRAVELLY SAND (SW), brown to grey, moist, coarse to very coarse sand, sub-rounded gravel up to 3/8"	
			24"/24"	CL		CLAY (CL), light reddish brown, moist, very stiff, low to medium plasticity, no odor	
30						Total depth of boring = 30 ft bgs	

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Figure 3

Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Clayey SAND (SC)
Clayey SAND to Sandy CLAY (SC-CL)
Poorly graded SAND (SP)
Well graded SAND (SW)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB04 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**T. Rickard**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				CL		SILTY CLAY (CL), brown, moist, ~15 to 25% silt, medium plasticity, medium stiff, piece of brick in sample, likely fill	Top 5 feet hand augered
		AB04-1.0					
						More silt and brick fragments at 3 feet	
5		AB04-5.0					
				CL		SILTY CLAY (CL), brown, moist, ~15 to 25% silt, low plasticity, trace rounded pebbles up to 1/4 inch in diameter	
			36"/36"				
			48"/48"				
10							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB04

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB04-10.0		CL		SILTY CLAY (CL), brown, moist, ~15 to 25% silt, low plasticity, trace rounded pebbles up to 1/4 inch in diameter	
			48"/48"	SP-CL		Interbedded sands and clays. SAND (SP), brown, moist, fine grain size.	
				CL		SILTY CLAYEY SAND, brown, fine sand, ~20% sand, ~15% silt, medium stiff, low plasticity	
			42"/48"	SP		SAND (SP), light tan/brown, fine sand, trace silt	
15		AB04-15.0				Trace gravel up to 1 inch in diameter	
				CL		SANDY CLAY (CL), light brown, moist, fine sand, ~20 to 40% sand, low plasticity, very stiff, no odor	
			45"/48"				
				SC		CLAYEY SAND (SC), ~15% clay, ~5 to 10% 1/4 inch rounded gravel, fine to coarse sand	
20		AB04-20.0		SW		GRAVELLY SAND (SW), grey-red-brown, gravel up to 1 inch subrounded slate and igneous intrusive rock, fine to coarse sand, no odor	
			32"/48"				
25		AB04-25.0					
			18"/48"				
			24"/24"				
30						Total depth of boring = 30 ft bgs	

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Clayey SAND (SC)
Poorly graded SAND (SP)
Well graded SAND (SW)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
CME Sampler
Pitcher Sample
Bulk Sample
Grab Sample
2-inch-OD unlined split spoon (SPT)
3-inch-OD California w/ brass rings
2.5-inch-OD Modified California w/ brass liners
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB05 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**D. Phelps**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt		Three inches of asphalt; no base	
				CL		CLAY (CL), black, damp, firm to stiff, massive, fine sand, low plasticity	Top 5 feet hand augered
		AB04-1.0					
				SM		SILTY SAND (SM), dark yellowish brown, damp, fine, poorly graded, massive, fine sand content varies, multi-colored coarse clasts of varying angularity and source material	
5		AB04-5.0					
			36"/36"				
			30"/48"			Increasing clay content	
10							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB05

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		~~AB04-10.0~~				Increasing clay content	
			30"/48"				
			36"/48"				
15		AB04-15.0					
			36"/48"				
				SP		SAND WITH GRAVEL (SP), dark grayish brown, dry, fine to medium with coarse black slate/shale grains and gravels up to 1 inch in diameter, massive	
20		AB04-15.0					
			36"/48"				
				SP		GRAVELLY SAND (SP), dry, increased gravel content, mix of brown dark grey and reddish clasts in medium sand matrix	
25		AB04-25.0					
			30"/36"				
				SP		SAND (SP), brown, poorly graded, fine to medium sand, ~~some coarse s~~and, very rare gravels up to 1 inch in diameter	
			30"/36"				
		AB04-29.5					
30						Total depth of boring = 30 ft bgs	

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Silty SAND (SM)
Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
CME Sampler
Pitcher Sample
Bulk Sample
Grab Sample
2-inch-OD unlined split spoon (SPT)
3-inch-OD California w/ brass rings
2.5-inch-OD Modified California w/ brass liners
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB06 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**D. Phelps**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Concrete		Six inches of concrete and two inches of base	Top 5 feet hand augered
		AB06-1.0		CL		CLAY (CL), black, damp, firm, trace fine sand and silt, low plasticity	
				SM		SILTY SAND (SM), brown, damp, fine, poorly graded, massive, speckled with red and black coarse grains in silty sand matrix, common gravels up to 1 inch in diameter	
5		AB06-5.0					
			36"/36"				
			24"/48"				
10							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB06

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB06-10.0		SM		SILTY SAND (SM), brown, damp, fine, poorly graded, massive, speckled with red and black coarse grains in silty sand matrix, common gravels up to 1 inch in diameter	
			24"/48"				
			36"/48"				
15		AB06-15.0					
			24"/48"	GP		SANDY GRAVEL (GP), dark grayish brown with multiple colored clasts (red; black and yellowish brown) in sandy matrix, subangular to subrounded gravels 1 to 1.5 inches in diameter, fine to medium grained sand	
20		AB06-20.0					
			36"/36"				
				SP		Sand (SP); dark yellowish brown; damp; fine; poorly graded; massive	
25		AB06-25.0					
			36"/48"			Becomes yellowish brown; fine to coarse grained and moderately graded	
			24"/24"				
30						Total depth of boring = 30 ft bgs	

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1. Depth (feet): Depth in feet below the ground surface.
2. Sample Type: Type of soil sample collected at the depth interval shown.
3. Sample Number: Sample identification number.
4. Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5. USCS Symbol: Type of material encountered.
6. Graphic Log: Graphic depiction of the subsurface material encountered.
7. MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8. REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Portland Cement Concrete
Poorly graded GRAVEL (GP)
Silty SAND (SM)
Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB07 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**D. Phelps**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt		Three inches of asphalt; no base	
				ML		SANDY SILT (ML); very dark grayish brown,damp, sand is fine grained, low plasticity, intermixed angular clasts of quartz and other material that are size of coarse sand	Top 5 feet hand augered
		AB07-1.0					
				SP		SAND (SP), dark yellowish brown, dry to damp, fine, poorly graded, sand content varies, mostly massive	
5		AB07-5.0					
			0"/36"				
			36"/48"				
10							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB07

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB07-10.0		SP		SAND (SP), dark yellowish brown, dry to damp, fine, poorly graded, sand content varies, mostly massive	
			36"/48"	SP		GRAVELLY SAND (SP), dark brown, dry-damp, fine to medium grained with some coarse grains, moderately graded	
			24"/36"	SM		SILTY SAND (SM), trace faint laminations	
15		AB07-15.0				Increase in coarse sand to fine gravel sized clasts of angular quartz and flat subangular slate/shale material up to 1.5 inches in diameter	
						Becomes dark grey	
			24"/24"	SP		SAND (SP), grayish brown, dry, fine to medium with trace coarse grains and gravels, gravels are angular to subrounded of quartz and shale/slate, massive; some light red colored grains	
			24"/36"				
20		AB07-20.0					
			30"/36"				
			24"/36"				
25		AB07-25.0					
						Becomes dark yellowish brown; damp; increase in finer grained sand	
			24"/24"				
			24"/24"			Increase in gravels 1 to 2 inches in diameter; becomes brown , red colored gravel	
30						Total depth of boring = 30 ft bgs	

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
SILT, SILT w/SAND, SANDY SILT (ML)
Silty SAND (SM)
Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
CME Sampler
Pitcher Sample
Bulk Sample
Grab Sample
2-inch-OD unlined split spoon (SPT)
3-inch-OD California w/ brass rings
2.5-inch-OD Modified California w/ brass liners
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB08 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**D. Phelps**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**30'**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt		Three inches of asphalt; no base	
				CL		SANDY CLAY (CL), very dark grayish brown, damp, soft, sand is fine grained, some silt, low plasticity	Top 5 feet hand augered
		AB08-1.0					
						Varying silt and sand content	
5		AB08-5.0					
			36"/36"				
						Increase in medium-coarse sand	
			36"/48"				
				SP		GRAVELLY SAND (SP), very dark grey, mottled with yellowish brown sand and black/red clasts, damp, fine to medium sand with	
10							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB08

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB08-10.0		SP		GRAVELLY SAND (SP), very dark grey, mottled with yellowish brown sand and black/red clasts, damp, fine to medium sand with coarse sand grains, subangular poorly graded gravels 1 to 1.5 inches in diameter, massive	
			36"/48"				
						Decrease in gravel content	
			36"/48"				
15		AB08-15.0					
			24"/48"				
20		AB08-20.0		GP		SANDY GRAVEL (GP), very dark gray mottled with yellowish brown sand, black/red gravel clasts, gravels from 1 to 1.5 inches in diameter	
			36"/48"	SP		Three inch interbed of dark yellowish brown fine sand	
25		AB08-25.0					
			36"/48"				
			24"/24"				
		AB08-29.5					
30						Total depth of boring = 30 ft bgs	

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
Poorly graded GRAVEL (GP)
Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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Figure B-1

Project: **Alexander Hamilton Senior High School** Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA** Project Number: **S030.008.003**	Log of Boring AB09 **Sheet 1 of 2**

Date(s) Drilled	**02/18/19**	Logged By	**T. Rickard**	Checked By	**C. Steedman, PG**
Drilling Method	**Direct Push**	Drill Bit Size/Type	**2" Rods**	Total Depth of Borehole	**26.5 ft**
Drill Rig Type	**GeoProbe 2200**	Drilling Contractor	**Strongarm**	Approximate Surface Elevation	**Not Applicable**
Groundwater Level and Date Measured	**Not encountered**	Sampling Method(s)	**Acetate Liners**	Hammer Data	
Borehole Backfill	**Portland Cement Grout**	Location			

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0				Asphalt		Four inches of asphalt	
				SP		GRAVELLY SILTY SAND (SP), light brown/grey, dry, ~10% silt, ~20% gravel up to 1/4 inch, fine sand, poorly graded	Top 5 feet hand augered
		AB09-1.0					
5		AB09-5.0					
			36"/36"				
10							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Log of Boring AB09

Sheet 2 of 2

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
10		AB09-10.0		SP		GRAVELLY SILTY SAND (SP), light brown/grey, dry, ~10% silt, ~20% gravel up to 1/4 inch, fine sand, poorly graded	
			36"/36"				
			48"/48"	SM		No silt; gravelly sand	
						SILTY SAND (SM), light tan/brown, trace gravel, fine sand	
			48"/48"				
				SP-SM		SILTY GRAVELLY SAND (SP-SM), brown, fine sand, poorly graded, ~20% subangular gravel, ~ 30% silt	
15		AB09-15.0					
				SP		GRAVELLY SAND (SP), grey-red-brown, dry, fine to coarse sand, primarily medium to coarse sand, moderately graded, ~ 20 to 40% subangular to subangular gravel up to 3/4 inch in diameter composed of slate and granodiorite	
			48"/48"				
20		AB09-20.0					
						Predominantly medium to coarse grained sand	
			33"/48"				
			18"/18"				
25		AB09-25.0					
						Total depth of boring = 26.5 ft bgs, refusal encountered	
30							

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Project: **Alexander Hamilton Senior High School**
Project Location: **2955 S. Robertson Boulevard, Los Angeles, CA**
Project Number: **S030.008.003**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: Type of material encountered.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)
Silty SAND (SM)
Poorly graded SAND (SP)
Poorly graded SAND with Silt (SP-SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
CME Sampler
Pitcher Sample
Bulk Sample
Grab Sample
2-inch-OD unlined split spoon (SPT)
3-inch-OD California w/ brass rings
2.5-inch-OD Modified California w/ brass liners
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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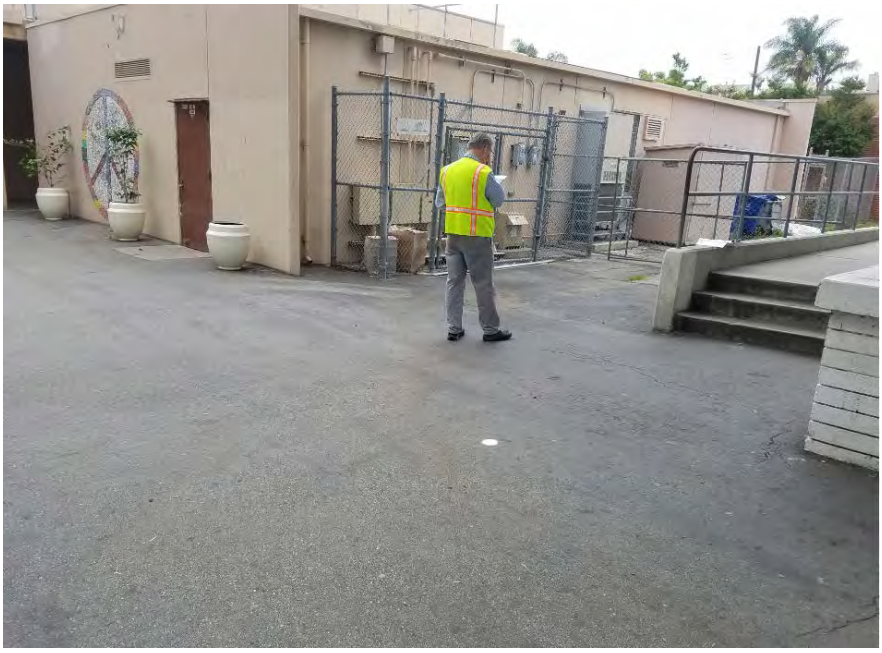
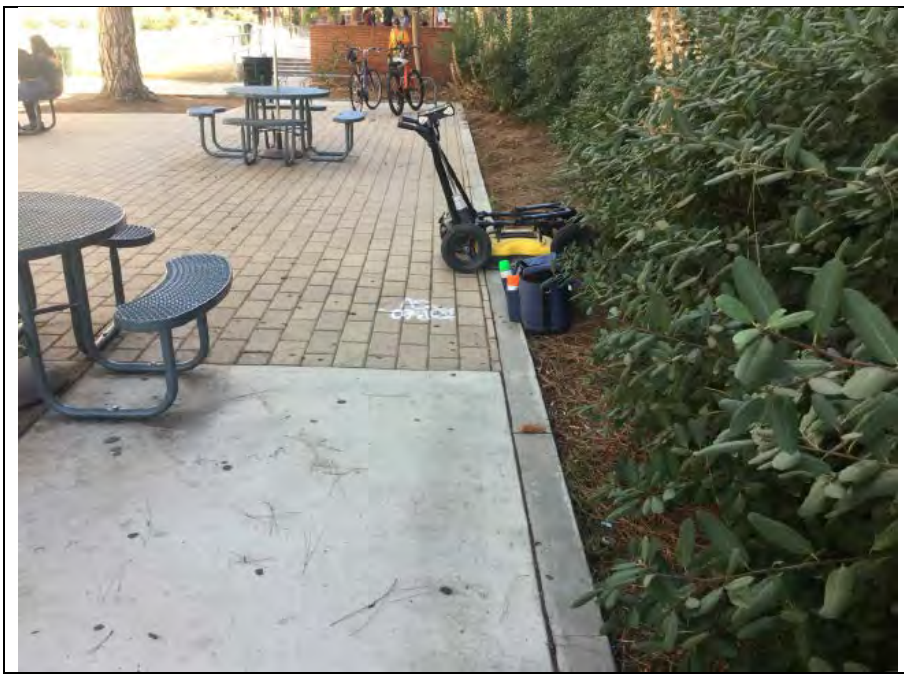
Figure B-1

APPENDIX B
PHOTOGRAPH LOG



Photograph 1:

The photograph shows the marking of boring locations prior to drilling activities. View to the southeast.



Photograph 2:

The photographs shows geophysical utility clearance prior to drilling activities. View to the south.

SAFETY FIRST	CLIENT: Los Angeles Unified School District	**PHOTO LOG**
terraphase engineering	PROJECT: Alexander Hamilton High School 2955 S Robertson Blvd, Los Angeles, CA	
	PROJECT NUMBER: S030.008.004	**PAGE 1**

Photograph 3:

The photograph shows an example of coring activities prior to drilling. View to the north.

Photograph 4:

The photograph shows typical drilling activities to facilitate soil sampling and soil vapor probe installation via the direct push method. View to the south.

Photograph 5:

The photograph shows soil recovered in acetate liners from direct-push drilling. Sample then collected in laboratory provided jars for analysis.

Photograph 6:

The photograph shows the final surface completion of stepout borings around B57. View to the northeast.

SAFETY FIRST	CLIENT: Los Angeles Unified School District	**PHOTO LOG**
terraphase engineering	PROJECT: Alexander Hamilton High School 2955 S Robertson Blvd, Los Angeles, CA	
	PROJECT NUMBER: S030.008.004	**PAGE 3**

Photograph 7:

The photograph shows an example of temporary, dual-nested soil vapor probes.

Photograph 8:

The photograph shows the storage location of 55-gallon drums containing investigation-derived waste. View to the east.

	Photograph 8: The photograph shows the sampling of soil vapor using liquid leak check compound.

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

11 September 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 08/31/18 17:57. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B05-0.5	T182726-01	Soil	08/31/18 11:10	08/31/18 17:57
B05-1.5	T182726-02	Soil	08/31/18 11:15	08/31/18 17:57
B05-2.5	T182726-03	Soil	08/31/18 11:20	08/31/18 17:57
B05-5.0	T182726-04	Soil	08/31/18 10:55	08/31/18 17:57
B05-10.0	T182726-05	Soil	08/31/18 11:00	08/31/18 17:57
B05-15.0	T182726-06	Soil	08/31/18 11:05	08/31/18 17:57
EB-01	T182726-07	Water	08/31/18 13:00	08/31/18 17:57

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

DETECTIONS SUMMARY

Sample ID: B05-0.5 **Laboratory ID:** T182726-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B05-1.5 **Laboratory ID:** T182726-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B05-2.5 **Laboratory ID:** T182726-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**18**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B05-5.0 **Laboratory ID:** T182726-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.1**	5.0	mg/kg	EPA 6010b	
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**29**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**27**	1.0	mg/kg	EPA 6010b	
Nickel	**25**	2.0	mg/kg	EPA 6010b	
Vanadium	**62**	5.0	mg/kg	EPA 6010b	
Zinc	**68**	1.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Sample ID: B05-10.0 **Laboratory ID:** T182726-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.9**	5.0	mg/kg	EPA 6010b	
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**30**	2.0	mg/kg	EPA 6010b	
Cobalt	**9.7**	2.0	mg/kg	EPA 6010b	
Copper	**24**	1.0	mg/kg	EPA 6010b	
Nickel	**24**	2.0	mg/kg	EPA 6010b	
Vanadium	**60**	5.0	mg/kg	EPA 6010b	
Zinc	**59**	1.0	mg/kg	EPA 6010b	

Sample ID: B05-15.0 **Laboratory ID:** T182726-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**26**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**46**	2.0	mg/kg	EPA 6010b	
Cobalt	**14**	2.0	mg/kg	EPA 6010b	
Copper	**40**	1.0	mg/kg	EPA 6010b	
Lead	**8.1**	3.0	mg/kg	EPA 6010b	
Nickel	**33**	2.0	mg/kg	EPA 6010b	
Vanadium	**90**	5.0	mg/kg	EPA 6010b	
Zinc	**86**	1.0	mg/kg	EPA 6010b	

Sample ID: EB-01 **Laboratory ID:** T182726-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**26**	0.50	ug/l	EPA 8260B	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-0.5

T182726-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8090426	09/04/18	09/05/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8090421	09/04/18	09/06/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*82.7 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*83.2 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-1.5

T182726-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8090426	09/04/18	09/05/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8090421	09/04/18	09/06/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*83.0 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*77.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B05-2.5

T182726-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8090426	09/04/18	09/05/18	6020 ICP-MS	
Lead	**18**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8090421	09/04/18	09/06/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*55.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B05-5.0

T182726-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	370	ug/kg	1	8090416	09/04/18	09/05/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*72.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8090508	09/05/18	09/06/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*103 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8090425	09/04/18	09/05/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**8.1**	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**29**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**27**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**25**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**62**	5.0	"	"	"	"	"	"	
Zinc	**68**	1.0	"	"	"	"	"	"	

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B05-5.0

T182726-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8090427	09/04/18	09/05/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.6	ug/kg	1	8090415	09/04/18	09/05/18	EPA 8260B/5035	
Bromochloromethane	ND	4.6	"	"	"	"	"	"	
Bromodichloromethane	ND	4.6	"	"	"	"	"	"	
Bromoform	ND	4.6	"	"	"	"	"	"	
Bromomethane	ND	4.6	"	"	"	"	"	"	
n-Butylbenzene	ND	4.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.6	"	"	"	"	"	"	
Chlorobenzene	ND	4.6	"	"	"	"	"	"	
Chloroethane	ND	4.6	"	"	"	"	"	"	
Chloroform	ND	4.6	"	"	"	"	"	"	
Chloromethane	ND	4.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
Dibromochloromethane	ND	4.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.6	"	"	"	"	"	"	
Dibromomethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.6	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	

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B05-5.0

T182726-04 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.6	ug/kg	1	8090415	09/04/18	09/05/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.6	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.6	"	"	"	"	"	"	
Isopropylbenzene	ND	4.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.6	"	"	"	"	"	"	
Methylene chloride	ND	4.6	"	"	"	"	"	"	
Naphthalene	ND	4.6	"	"	"	"	"	"	
n-Propylbenzene	ND	4.6	"	"	"	"	"	"	
Styrene	ND	4.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
Tetrachloroethene	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.6	"	"	"	"	"	"	
Trichloroethene	ND	4.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
Vinyl chloride	ND	4.6	"	"	"	"	"	"	
Benzene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	4.6	"	"	"	"	"	"	
Ethylbenzene	ND	4.6	"	"	"	"	"	"	
m,p-Xylene	ND	9.1	"	"	"	"	"	"	
o-Xylene	ND	4.6	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-5.0

T182726-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*		*76.1-127*	*8090415*	*09/04/18*	*09/05/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*94.2 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*103 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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B05-10.0

T182726-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	360	ug/kg	1	8090416	09/04/18	09/07/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*68.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8090508	09/05/18	09/06/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*112 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8090425	09/04/18	09/05/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**6.9**	5.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**30**	2.0	"	"	"	"	"	"	
Cobalt	**9.7**	2.0	"	"	"	"	"	"	
Copper	**24**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**24**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**60**	5.0	"	"	"	"	"	"	
Zinc	**59**	1.0	"	"	"	"	"	"	

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B05-10.0

T182726-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8090427	09/04/18	09/05/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.1	ug/kg	1	8090415	09/04/18	09/05/18	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	

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B05-10.0

T182726-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.1	ug/kg	1	8090415	09/04/18	09/05/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	
m,p-Xylene	ND	8.1	"	"	"	"	"	"	
o-Xylene	ND	4.1	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-10.0

T182726-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.6 %*	*76.1-127*		*8090415*	*09/04/18*	*09/05/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*93.4 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*101 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-15.0

T182726-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8090416	09/04/18	09/05/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*70.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8090508	09/05/18	09/06/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*112 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8090425	09/04/18	09/05/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**26**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**46**	2.0	"	"	"	"	"	"	
Cobalt	**14**	2.0	"	"	"	"	"	"	
Copper	**40**	1.0	"	"	"	"	"	"	
Lead	**8.1**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**33**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**90**	5.0	"	"	"	"	"	"	
Zinc	**86**	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-15.0

T182726-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8090427	09/04/18	09/05/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.2	ug/kg	1	8090415	09/04/18	09/05/18	EPA 8260B/5035	
Bromochloromethane	ND	4.2	"	"	"	"	"	"	
Bromodichloromethane	ND	4.2	"	"	"	"	"	"	
Bromoform	ND	4.2	"	"	"	"	"	"	
Bromomethane	ND	4.2	"	"	"	"	"	"	
n-Butylbenzene	ND	4.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.2	"	"	"	"	"	"	
Chlorobenzene	ND	4.2	"	"	"	"	"	"	
Chloroethane	ND	4.2	"	"	"	"	"	"	
Chloroform	ND	4.2	"	"	"	"	"	"	
Chloromethane	ND	4.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
Dibromochloromethane	ND	4.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.3	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.2	"	"	"	"	"	"	
Dibromomethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-15.0

T182726-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.2	ug/kg	1	8090415	09/04/18	09/05/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.2	"	"	"	"	"	"	
Isopropylbenzene	ND	4.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.2	"	"	"	"	"	"	
Methylene chloride	ND	4.2	"	"	"	"	"	"	
Naphthalene	ND	4.2	"	"	"	"	"	"	
n-Propylbenzene	ND	4.2	"	"	"	"	"	"	
Styrene	ND	4.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
Tetrachloroethene	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.2	"	"	"	"	"	"	
Trichloroethene	ND	4.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
Vinyl chloride	ND	4.2	"	"	"	"	"	"	
Benzene	ND	4.2	"	"	"	"	"	"	
Toluene	ND	4.2	"	"	"	"	"	"	
Ethylbenzene	ND	4.2	"	"	"	"	"	"	
m,p-Xylene	ND	8.3	"	"	"	"	"	"	
o-Xylene	ND	4.2	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

B05-15.0

T182726-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.2 %*		*76.1-127*	*8090415*	*09/04/18*	*09/05/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*97.1 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*108 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

EB-01

T182726-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	50	ug/l	1	8090420	09/07/18	09/07/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*94.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8083114	09/04/18	09/04/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*132 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8090412	09/04/18	09/05/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	09/05/18	"	
Cadmium	ND	50	"	"	"	"	09/05/18	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

EB-01

T182726-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	1.0	ug/l	1	8090413	09/04/18	09/05/18	6020 ICP-MS	
Lead	ND	2.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8090414	09/04/18	09/05/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8090411	09/04/18	09/06/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*54.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*70.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

EB-01

T182726-07 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	1.0	ug/l	1	8090419	09/04/18	09/06/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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EB-01

T182726-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/04/18	09/06/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**26**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.7 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*97.8 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*92.6-108*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090416 - EPA 5035 GC										
Blank (8090416-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
C6-C12 (GRO)	0.00		ug/kg							
Surrogate: 4-Bromofluorobenzene	*80.8*		*"*	*100*		*80.8*	*65-135*			
LCS (8090416-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
C6-C12 (GRO)	831	250	ug/kg	996		83.4	75-125			
Surrogate: 4-Bromofluorobenzene	*76.3*		*"*	*100*		*76.3*	*65-135*			
LCS Dup (8090416-BSD1)				Prepared: 09/04/18 Analyzed: 09/05/18						
C6-C12 (GRO)	878	250	ug/kg	996		88.2	75-125	5.52	20	
Surrogate: 4-Bromofluorobenzene	*70.6*		*"*	*100*		*70.6*	*65-135*			
Batch 8090420 - EPA 5030 GC										
Blank (8090420-BLK1)				Prepared & Analyzed: 09/07/18						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*79.9*		*"*	*100*		*79.9*	*65-135*			
LCS (8090420-BS1)				Prepared & Analyzed: 09/07/18						
C6-C12 (GRO)	911	50	ug/l	996		91.5	75-125			
Surrogate: 4-Bromofluorobenzene	*94.3*		*"*	*100*		*94.3*	*65-135*			
LCS Dup (8090420-BSD1)				Prepared: 09/07/18 Analyzed: 09/10/18						
C6-C12 (GRO)	894	50	ug/l	996		89.7	75-125	1.95	20	
Surrogate: 4-Bromofluorobenzene	*96.7*		*"*	*100*		*96.7*	*65-135*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8083114 - EPA 3510C GC										
Blank (8083114-BLK1)				Prepared & Analyzed: 09/04/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*3.93*		*"*	*4.00*		*98.3*	*65-135*			
LCS (8083114-BS1)				Prepared & Analyzed: 09/04/18						
C13-C28 (DRO)	17.2	0.50	mg/l	20.0		86.0	75-125			
Surrogate: p-Terphenyl	*3.71*		*"*	*4.00*		*92.9*	*65-135*			
LCS Dup (8083114-BSD1)				Prepared & Analyzed: 09/04/18						
C13-C28 (DRO)	17.5	0.50	mg/l	20.0		87.5	75-125	1.75	20	
Surrogate: p-Terphenyl	*3.76*		*"*	*4.00*		*93.9*	*65-135*			
Batch 8090508 - EPA 3550B GC										
Blank (8090508-BLK1)				Prepared: 09/05/18 Analyzed: 09/06/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*113*		*"*	*99.0*		*114*	*65-135*			
LCS (8090508-BS1)				Prepared: 09/05/18 Analyzed: 09/06/18						
C13-C28 (DRO)	550	10	mg/kg	495		111	75-125			
Surrogate: p-Terphenyl	*112*		*"*	*99.0*		*114*	*65-135*			
LCS Dup (8090508-BSD1)				Prepared: 09/05/18 Analyzed: 09/06/18						
C13-C28 (DRO)	510	10	mg/kg	495		103	75-125	8.01	20	
Surrogate: p-Terphenyl	*105*		*"*	*99.0*		*106*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090412 - EPA 3010A										
Blank (8090412-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8090412-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	541	50	ug/l	500		108	75-125			
Barium	511	50	"	500		102	75-125			
Cadmium	496	50	"	500		99.1	75-125			
Chromium	500	50	"	500		99.9	75-125			
Lead	503	50	"	500		101	75-125			
Matrix Spike (8090412-MS1)	**Source: T182726-07**			Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	529	50	ug/l	500	ND	106	75-125			
Barium	501	50	"	500	ND	100	75-125			
Cadmium	485	50	"	500	ND	96.9	75-125			
Chromium	487	50	"	500	ND	97.5	75-125			
Lead	491	50	"	500	ND	98.2	75-125			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090412 - EPA 3010A										
Matrix Spike Dup (8090412-MSD1)		**Source: T182726-07**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	485	50	ug/l	500	ND	97.0	75-125	8.74	20	
Barium	480	50	"	500	ND	95.9	75-125	4.30	20	
Cadmium	465	50	"	500	ND	93.0	75-125	4.06	20	
Chromium	473	50	"	500	ND	94.5	75-125	3.05	20	
Lead	486	50	"	500	ND	97.3	75-125	0.924	20	
Batch 8090425 - EPA 3050B										
Blank (8090425-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8090425-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	107	5.0	mg/kg	100		107	75-125			
Barium	106	1.0	"	100		106	75-125			
Cadmium	104	2.0	"	100		104	75-125			
Chromium	106	2.0	"	100		106	75-125			
Lead	106	3.0	"	100		106	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090425 - EPA 3050B										
Matrix Spike (8090425-MS1)		**Source: T182725-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	116	5.0	mg/kg	100	9.03	107	75-125			
Barium	113	1.0	"	100	3.19	110	75-125			
Cadmium	104	2.0	"	100	ND	104	75-125			
Chromium	129	2.0	"	100	13.3	116	75-125			
Lead	108	3.0	"	100	ND	108	75-125			
Matrix Spike Dup (8090425-MSD1)		**Source: T182725-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	105	5.0	mg/kg	99.0	9.03	96.9	75-125	10.0	20	
Barium	107	1.0	"	99.0	3.19	105	75-125	5.25	20	
Cadmium	101	2.0	"	99.0	ND	102	75-125	3.41	20	
Chromium	119	2.0	"	99.0	13.3	107	75-125	8.59	20	
Lead	105	3.0	"	99.0	ND	106	75-125	2.85	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090413 - EPA 3010A										
Blank (8090413-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	ND	1.0	ug/l							
Lead	ND	2.0	"							
LCS (8090413-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	49.8	1.0	ug/l	50.0		99.6	80-120			
Lead	50.5	2.0	"	50.0		101	80-120			
Matrix Spike (8090413-MS1)		**Source: T182726-07**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	47.3	1.0	ug/l	50.0	ND	94.6	75-125			
Lead	48.9	2.0	"	50.0	ND	97.8	75-125			
Matrix Spike Dup (8090413-MSD1)		**Source: T182726-07**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	47.6	1.0	ug/l	50.0	ND	95.1	75-125	0.547	20	
Lead	47.9	2.0	"	50.0	ND	95.8	75-125	2.12	20	
Batch 8090426 - EPA 3050B										
Blank (8090426-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Antimony	ND	0.25	mg/kg							
Arsenic	ND	0.25	"							
Barium	ND	0.25	"							
Beryllium	ND	0.25	"							
Cadmium	ND	0.25	"							
Chromium	ND	0.25	"							
Cobalt	ND	0.25	"							
Copper	ND	0.25	"							
Lead	ND	0.25	"							
Mercury	ND	0.025	"							
Molybdenum	ND	0.25	"							
Nickel	ND	0.25	"							
Selenium	ND	1.2	"							
Silver	ND	0.25	"							
Thallium	ND	0.25	"							
Vanadium	ND	0.25	"							
Zinc	ND	0.25	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090426 - EPA 3050B										
LCS (8090426-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	24.0	0.25	mg/kg	25.0		96.0	80-120			
Barium	24.5	0.25	"	25.0		98.0	80-120			
Cadmium	24.0	0.25	"	25.0		96.0	80-120			
Chromium	23.5	0.25	"	25.0		94.0	80-120			
Lead	24.3	0.25	"	25.0		97.1	80-120			
Duplicate (8090426-DUP1)		**Source: T182726-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Barium	263	1.2	mg/kg		155			51.5	200	
Matrix Spike (8090426-MS1)		**Source: T182726-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	36.6	0.25	mg/kg	23.4	16.6	85.5	75-125			
Barium	149	0.25	"	23.4	155	NR	75-125			QM-07
Cadmium	24.6	0.25	"	23.4	2.12	96.2	75-125			
Chromium	53.1	0.25	"	23.4	38.4	62.9	75-125			QM-PS
Lead	30.3	0.25	"	23.4	10.8	83.7	75-125			
Matrix Spike Dup (8090426-MSD1)		**Source: T182726-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Arsenic	34.9	0.25	mg/kg	22.9	16.6	79.9	75-125	4.64	20	
Barium	135	0.25	"	22.9	155	NR	75-125	10.1	20	QM-07
Cadmium	23.5	0.25	"	22.9	2.12	93.4	75-125	4.39	20	
Chromium	52.0	0.25	"	22.9	38.4	59.4	75-125	2.06	20	QM-PS
Lead	28.0	0.25	"	22.9	10.8	75.2	75-125	7.94	20	
Post Spike (8090426-PS1)		**Source: T182726-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Barium	149		mg/kg	25.0	155	NR	80-120			QM-07
Chromium	60.1		"	25.0	38.4	86.8	80-120			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090414 - EPA 7470A Water										
Blank (8090414-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	ND	0.50	ug/l							
LCS (8090414-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	5.07	0.50	ug/l	5.00		101	80-120			
Matrix Spike (8090414-MS1)		**Source: T182726-07**		Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	4.60	0.50	ug/l	5.00	ND	91.9	75-125			
Matrix Spike Dup (8090414-MSD1)		**Source: T182726-07**		Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	4.39	0.50	ug/l	5.00	ND	87.8	75-125	4.58	20	
Batch 8090427 - EPA 7471A Soil										
Blank (8090427-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	ND	0.10	mg/kg							
LCS (8090427-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	0.393	0.10	mg/kg	0.417		94.4	80-120			
Matrix Spike (8090427-MS1)		**Source: T182725-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	0.371	0.10	mg/kg	0.417	ND	89.1	75-125			
Matrix Spike Dup (8090427-MSD1)		**Source: T182725-01**		Prepared: 09/04/18 Analyzed: 09/05/18						
Mercury	0.371	0.10	mg/kg	0.417	ND	89.0	75-125	0.0647	20	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090411 - EPA 3510C GCMS/ECD										
Blank (8090411-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*51.5*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.514*		*"*	*1.00*		*51.4*	*35-140*			
LCS (8090411-BS1)				Prepared: 09/04/18 Analyzed: 09/05/18						
gamma-BHC (Lindane)	2.47	1.00	ug/l	4.00		61.8	40-120			
Heptachlor	2.36	1.00	"	4.00		59.0	40-120			
Aldrin	2.22	1.00	"	4.00		55.6	40-120			
Dieldrin	2.38	1.00	"	4.00		59.4	40-120			
Endrin	2.45	1.00	"	4.00		61.3	40-120			
4,4´-DDT	2.54	2.00	"	4.00		63.5	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.544*		*"*	*1.00*		*54.4*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.522*		*"*	*1.00*		*52.2*	*35-140*			

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090411 - EPA 3510C GCMS/ECD										
Matrix Spike (8090411-MS1)		**Source: T182720-16**		Prepared: 09/04/18 Analyzed: 09/05/18						
gamma-BHC (Lindane)	2.32	1.00	ug/l	4.00	ND	58.0	20-120			
Heptachlor	2.27	1.00	"	4.00	ND	56.8	20-120			
Aldrin	2.14	1.00	"	4.00	ND	53.4	20-120			
Dieldrin	2.25	1.00	"	4.00	ND	56.3	20-120			
Endrin	2.31	1.00	"	4.00	ND	57.9	20-120			
4,4´-DDT	2.49	2.00	"	4.00	ND	62.3	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.540*		*"*	*1.00*		*54.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.517*		*"*	*1.00*		*51.7*	*35-140*			
Matrix Spike Dup (8090411-MSD1)		**Source: T182720-16**		Prepared: 09/04/18 Analyzed: 09/05/18						
gamma-BHC (Lindane)	2.67	1.00	ug/l	4.00	ND	66.9	20-120	14.2	30	
Heptachlor	2.65	1.00	"	4.00	ND	66.3	20-120	15.4	30	
Aldrin	2.47	1.00	"	4.00	ND	61.6	20-120	14.3	30	
Dieldrin	2.85	1.00	"	4.00	ND	71.1	20-120	23.3	30	
Endrin	2.94	1.00	"	4.00	ND	73.4	20-120	23.7	30	
4,4´-DDT	3.28	2.00	"	4.00	ND	82.0	20-120	27.4	30	
Surrogate: Tetrachloro-meta-xylene	*0.580*		*"*	*1.00*		*58.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.604*		*"*	*1.00*		*60.4*	*35-140*			
Batch 8090421 - EPA 3550 ECD/GCMS										
Blank (8090421-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090421 - EPA 3550 ECD/GCMS										
Blank (8090421-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
Endosulfan II	ND	5.0	ug/kg							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.07*		*"*	*10.2*		*69.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.65*		*"*	*10.2*		*65.2*	*35-140*			
LCS (8090421-BS1)				Prepared: 09/04/18 Analyzed: 09/06/18						
gamma-BHC (Lindane)	28.7	5.0	ug/kg	40.8		70.2	40-120			
Heptachlor	29.1	5.0	"	40.8		71.3	40-120			
Aldrin	26.0	5.0	"	40.8		63.8	40-120			
Dieldrin	28.0	5.0	"	40.8		68.6	40-120			
Endrin	28.6	5.0	"	40.8		70.2	40-120			
4,4´-DDT	33.2	5.0	"	40.8		81.2	33-147			
Surrogate: Tetrachloro-meta-xylene	*6.77*		*"*	*10.2*		*66.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.56*		*"*	*10.2*		*64.3*	*35-140*			
Matrix Spike (8090421-MS1)		**Source: T182725-01**		Prepared: 09/04/18 Analyzed: 09/06/18						
gamma-BHC (Lindane)	31.7	5.0	ug/kg	40.0	ND	79.4	30-120			
Heptachlor	32.6	5.0	"	40.0	ND	81.6	30-120			
Aldrin	29.6	5.0	"	40.0	ND	74.0	30-120			
Dieldrin	32.5	5.0	"	40.0	ND	81.2	30-120			
Endrin	33.6	5.0	"	40.0	ND	84.1	30-120			
4,4´-DDT	39.4	5.0	"	40.0	ND	98.4	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.49*		*"*	*10.0*		*74.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.29*		*"*	*10.0*		*72.9*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090421 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (8090421-MSD1)		**Source: T182725-01**		Prepared: 09/04/18 Analyzed: 09/06/18						
gamma-BHC (Lindane)	28.5	5.0	ug/kg	39.6	ND	71.9	30-120	9.82	30	
Heptachlor	28.9	5.0	"	39.6	ND	72.9	30-120	11.2	30	
Aldrin	26.1	5.0	"	39.6	ND	65.9	30-120	11.6	30	
Dieldrin	28.0	5.0	"	39.6	ND	70.7	30-120	13.8	30	
Endrin	28.9	5.0	"	39.6	ND	73.1	30-120	14.0	30	
4,4´-DDT	32.7	5.0	"	39.6	ND	82.5	30-120	17.6	30	
Surrogate: Tetrachloro-meta-xylene	*6.85*		*"*	*9.90*		*69.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*5.75*		*"*	*9.90*		*58.0*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090415 - EPA 5035 GCMS										
Blank (8090415-BLK1)				Prepared: 09/04/18 Analyzed: 09/05/18						
1,1-Dichloroethene	ND	5.0	ug/kg							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
LCS (8090415-BS1)				Prepared: 09/04/18 Analyzed: 09/06/18						
1,1-Dichloroethene	81.2	5.0	ug/kg	99.6		81.5	75-125			
Trichloroethene	92.5	5.0	"	99.6		92.8	75-125			
LCS Dup (8090415-BSD1)				Prepared: 09/04/18 Analyzed: 09/06/18						
1,1-Dichloroethene	90.8	5.0	ug/kg	99.6		91.1	75-125	11.1	20	
Trichloroethene	98.9	5.0	"	99.6		99.3	75-125	6.70	20	
Batch 8090419 - EPA 5030 GCMS										
Blank (8090419-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090419 - EPA 5030 GCMS										
Blank (8090419-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
1,2-Dichlorobenzene	ND	1.0	ug/l							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							
p-Isopropyltoluene	ND	1.0	"							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090419 - EPA 5030 GCMS										
Blank (8090419-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
Toluene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.9*		*"*	*20.0*		*99.3*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.4*		*"*	*20.0*		*96.8*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*99.8*	*92.6-108*			
LCS (8090419-BS1)				Prepared: 09/04/18 Analyzed: 09/07/18						
Chlorobenzene	19.1	1.0	ug/l	20.0		95.6	79.3-117			
1,1-Dichloroethene	17.6	1.0	"	20.0		88.0	68.3-130			
Trichloroethene	18.8	1.0	"	20.0		94.0	82.4-119			
Benzene	19.4	0.50	"	20.0		96.8	79.9-118			
Toluene	18.7	0.50	"	20.0		93.7	78.7-116			
Surrogate: 4-Bromofluorobenzene	*20.0*		*"*	*20.0*		*100*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.8*		*"*	*20.0*		*99.2*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*100*	*92.6-108*			
LCS Dup (8090419-BSD1)				Prepared: 09/04/18 Analyzed: 09/07/18						
Chlorobenzene	20.7	1.0	ug/l	20.0		103	79.3-117	7.79	20	
1,1-Dichloroethene	18.7	1.0	"	20.0		93.6	68.3-130	6.28	20	
Trichloroethene	21.0	1.0	"	20.0		105	82.4-119	10.9	20	
Benzene	21.0	0.50	"	20.0		105	79.9-118	8.27	20	
Toluene	20.3	0.50	"	20.0		102	78.7-116	8.19	20	
Surrogate: 4-Bromofluorobenzene	*19.8*		*"*	*20.0*		*99.0*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.7*		*"*	*20.0*		*98.6*	*71.5-128*			
Surrogate: Toluene-d8	*19.8*		*"*	*20.0*		*98.8*	*92.6-108*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/11/18 14:23

Notes and Definitions

QM-PS	The percent recovery and/or RPD are outside acceptance criteria. Results accepted based upon percent recovery results in the post spike and/or serial dilution.
QM-07	The spike recovery and or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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949-297-5020

Chain of Custody Record

Client: TERRAPHASE ENGINEERING INC
Address: 18401 VON KARMAN AVE IRVINE CA
Phone: 949 371 2207 Fax:
Project Manager: CLAIRE STEEDMAN

Date: 8/31/18 Page: 1 Of 1
Project Name: HAMILTON HIGHSCHOOL
Collector: DAN PHELPS Client Project #:
Batch #: T182726 EDF #:

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain TPH*	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb & As (6020)			Comments/Preservative	Total # of containers
01	B05-0.5	8/31/18	1110	SOIL	1 JAR											X	X				
02	B05-1.5		1115													X	X				
03	B05-2.5		1120													X	X				
04	B05-5.0		1055		5VOA 1JAR		X						X	X							
05	B05-10.0		1100				X						X	X							
06	B05-15.0		1105				X						X	X							
07	EB-01		1300	WATER	6 VOAS 2 PLY 1 1L AMBER		X						X	X		X	X				

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Daniel Phelps	1435 / 8/31/18		8-31-18 1435
	8-31-18 1757		8-31-18 17:57

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 5.5°

Turn around time: STD

Notes
TPH* = FOR TPH
ANALYZE FOR TPH-GRO AND TPH-DRO/ORO
**PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 182690

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182786

Client Name: TERRAPHASE ENG. Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN Date/Time Courier Received: 8-31-18 / 14:35

Lab Received by: SUNNY Date/Time Lab Received: 8-31-18 / 17:57

Total number of coolers received: 0

Temperature:	Cooler #1 4.3	°C +/- the CF (1.2°C) = 5.5	°C corrected temperature	
Temperature:	Cooler #2	°C +/- the CF (1.2°C) =	°C corrected temperature	
Temperature:	Cooler #3	°C +/- the CF (1.2°C) =	°C corrected temperature	
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	☒ **Yes**	☐ **No**
If NO:				
Samples received on ice?		☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?		☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☒ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: SL 9-1-18

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182726

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/11/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	08/31/18 17:57
Logged In By:	Sunny Lounethone	Date Logged In:	09/01/18 08:43

Samples Received at:	**5.5°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirm	Yes		

Analysis	Due	TAT	Expires	Comments
T182726-01 B05-0.5 [Soil] Sampled 08/31/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/11/18 15:00	5	12/29/18 11:10	As and Pb only
8081 Pesticides	09/11/18 15:00	5	09/14/18 11:10	
T182726-02 B05-1.5 [Soil] Sampled 08/31/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/11/18 15:00	5	12/29/18 11:15	As and Pb only
8081 Pesticides	09/11/18 15:00	5	09/14/18 11:15	
T182726-03 B05-2.5 [Soil] Sampled 08/31/18 11:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/11/18 15:00	5	12/29/18 11:20	As and Pb only
8081 Pesticides	09/11/18 15:00	5	09/14/18 11:20	
T182726-04 B05-5.0 [Soil] Sampled 08/31/18 10:55 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/11/18 15:00	5	02/27/19 10:55	
8015 CC (D/MO)	09/11/18 15:00	5	09/14/18 10:55	
8015 m 5035-GRO	09/11/18 15:00	5	09/14/18 10:55	
8260 5035	09/11/18 15:00	5	09/14/18 10:55	+ OXY
T182726-05 B05-10.0 [Soil] Sampled 08/31/18 11:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/11/18 15:00	5	02/27/19 11:00	
8015 CC (D/MO)	09/11/18 15:00	5	09/14/18 11:00	
8015 m 5035-GRO	09/11/18 15:00	5	09/14/18 11:00	
8260 5035	09/11/18 15:00	5	09/14/18 11:00	+ OXY

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WORK ORDER

T182726

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182726-06 B05-15.0 [Soil] Sampled 08/31/18 11:05 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/11/18 15:00	5	02/27/19 11:05	
8015 CC (D/MO)	09/11/18 15:00	5	09/14/18 11:05	
8015 m 5035-GRO	09/11/18 15:00	5	09/14/18 11:05	
8260 5035	09/11/18 15:00	5	09/14/18 11:05	+ OXY
T182726-07 EB-01 [Water] Sampled 08/31/18 13:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/11/18 15:00	5	02/27/19 13:00	
6020 Metals by ICP-MS	09/11/18 15:00	5	02/27/19 13:00	As and Pb only
8015 CC (D/MO)	09/11/18 15:00	5	09/07/18 13:00	
8015 m Gas Purge	09/11/18 15:00	5	09/14/18 13:00	
8081 Pesticides	09/11/18 15:00	5	09/07/18 13:00	
8260	09/11/18 15:00	5	09/14/18 13:00	+ OXY

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.

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18 September 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 09/10/18 18:43. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B57- 5.0	T182803-01	Soil	09/10/18 07:50	09/10/18 18:43
B57- 10.0	T182803-02	Soil	09/10/18 07:55	09/10/18 18:43
B57- 15.0	T182803-03	Soil	09/10/18 08:00	09/10/18 18:43
B53- 0.5	T182803-04	Soil	09/10/18 08:46	09/10/18 18:43
B53- 1.5	T182803-05	Soil	09/10/18 08:47	09/10/18 18:43
B53- 2.5	T182803-06	Soil	09/10/18 08:48	09/10/18 18:43
B53- 5.0	T182803-07	Soil	09/10/18 08:40	09/10/18 18:43
B53- 10.0	T182803-08	Soil	09/10/18 08:45	09/10/18 18:43
B53- 15.0	T182803-09	Soil	09/10/18 08:50	09/10/18 18:43
B65- 0.5	T182803-10	Soil	09/10/18 09:10	09/10/18 18:43
B65- 1.5	T182803-11	Soil	09/10/18 09:11	09/10/18 18:43
B65- 5.0	T182803-12	Soil	09/10/18 09:15	09/10/18 18:43
B65- 10.0	T182803-13	Soil	09/10/18 09:20	09/10/18 18:43
B65- 15.0	T182803-14	Soil	09/10/18 09:25	09/10/18 18:43
B61- 0.5	T182803-15	Soil	09/10/18 09:55	09/10/18 18:43
B61- 1.5	T182803-16	Soil	09/10/18 09:56	09/10/18 18:43
B61- 2.5	T182803-17	Soil	09/10/18 09:57	09/10/18 18:43
B61- 5.0	T182803-18	Soil	09/10/18 10:05	09/10/18 18:43
B61- 10.0	T182803-19	Soil	09/10/18 10:10	09/10/18 18:43
B61- 15.0	T182803-20	Soil	09/10/18 10:15	09/10/18 18:43
B02- 5.0	T182803-21	Soil	09/10/18 12:10	09/10/18 18:43
B02- 10.0	T182803-22	Soil	09/10/18 12:15	09/10/18 18:43
B02- 15.0	T182803-23	Soil	09/10/18 12:20	09/10/18 18:43
B06- 0.5	T182803-24	Soil	09/10/18 12:50	09/10/18 18:43
B06- 1.5	T182803-25	Soil	09/10/18 12:51	09/10/18 18:43
B06- 2.5	T182803-26	Soil	09/10/18 12:55	09/10/18 18:43

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B03- 0.5	T182803-27	Soil	09/10/18 13:00	09/10/18 18:43
B03- 1.5	T182803-28	Soil	09/10/18 13:02	09/10/18 18:43
B03- 2.5	T182803-29	Soil	09/10/18 13:05	09/10/18 18:43
B07- 0.5	T182803-30	Soil	09/10/18 13:20	09/10/18 18:43
B07- 1.5	T182803-31	Soil	09/10/18 13:21	09/10/18 18:43
B07- 2.5	T182803-32	Soil	09/10/18 13:25	09/10/18 18:43
B08- 0.5	T182803-33	Soil	09/10/18 13:35	09/10/18 18:43
B08- 1.5	T182803-34	Soil	09/10/18 13:36	09/10/18 18:43
B08- 2.5	T182803-35	Soil	09/10/18 13:38	09/10/18 18:43
B09- 0.5	T182803-36	Soil	09/10/18 13:45	09/10/18 18:43
B09- 1.5	T182803-37	Soil	09/10/18 13:46	09/10/18 18:43
B09- 2.5	T182803-38	Soil	09/10/18 13:48	09/10/18 18:43
B17- 0.5	T182803-39	Soil	09/10/18 14:09	09/10/18 18:43
B17- 1.5	T182803-40	Soil	09/10/18 14:10	09/10/18 18:43
B17- 2.5	T182803-41	Soil	09/10/18 14:12	09/10/18 18:43
B10- 0.5	T182803-42	Soil	09/10/18 14:35	09/10/18 18:43
B10- 1.5	T182803-43	Soil	09/10/18 14:37	09/10/18 18:43
B10- 2.5	T182803-44	Soil	09/10/18 14:40	09/10/18 18:43
B27- 0.5	T182803-45	Soil	09/10/18 14:42	09/10/18 18:43
B27- 1.5	T182803-46	Soil	09/10/18 14:23	09/10/18 18:43
B27- 2.5	T182803-47	Soil	09/10/18 14:25	09/10/18 18:43
B16- 0.5	T182803-48	Soil	09/10/18 14:50	09/10/18 18:43
B16- 1.5	T182803-49	Soil	09/10/18 14:53	09/10/18 18:43
B16- 2.5	T182803-50	Soil	09/10/18 14:55	09/10/18 18:43
EB-02	T182803-51	Water	09/10/18 15:30	09/10/18 18:43
B65- 2.5	T182803-52	Soil	09/10/18 09:12	09/10/18 18:43

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Terraphase Engineering - Irvine	Project:	Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number:	[none]	**Reported:**
Irvine CA, 92612	Project Manager:	Clare Steedman	09/18/18 17:07

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

DETECTIONS SUMMARY

Sample ID: B57- 5.0 **Laboratory ID:** T182803-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**25**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**45**	2.0	mg/kg	EPA 6010b	
Cobalt	**23**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**15**	3.0	mg/kg	EPA 6010b	
Nickel	**35**	2.0	mg/kg	EPA 6010b	
Vanadium	**77**	5.0	mg/kg	EPA 6010b	
Zinc	**90**	1.0	mg/kg	EPA 6010b	

Sample ID: B57- 10.0 **Laboratory ID:** T182803-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**37**	5.0	mg/kg	EPA 6010b	
Barium	**210**	1.0	mg/kg	EPA 6010b	
Chromium	**69**	2.0	mg/kg	EPA 6010b	
Cobalt	**30**	2.0	mg/kg	EPA 6010b	
Copper	**60**	1.0	mg/kg	EPA 6010b	
Lead	**21**	3.0	mg/kg	EPA 6010b	
Nickel	**55**	2.0	mg/kg	EPA 6010b	
Vanadium	**130**	5.0	mg/kg	EPA 6010b	
Zinc	**130**	1.0	mg/kg	EPA 6010b	

Sample ID: B57- 15.0 **Laboratory ID:** T182803-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**29**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**48**	2.0	mg/kg	EPA 6010b	
Cobalt	**24**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Sample ID: B57- 15.0 **Laboratory ID:** T182803-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**15**	3.0	mg/kg	EPA 6010b	
Nickel	**36**	2.0	mg/kg	EPA 6010b	
Vanadium	**88**	5.0	mg/kg	EPA 6010b	
Zinc	**83**	1.0	mg/kg	EPA 6010b	

Sample ID: B53- 0.5 **Laboratory ID:** T182803-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**27**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B53- 1.5 **Laboratory ID:** T182803-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.23	mg/kg	6020 ICP-MS	
Lead	**7.8**	0.23	mg/kg	6020 ICP-MS	

Sample ID: B53- 2.5 **Laboratory ID:** T182803-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B53- 5.0 **Laboratory ID:** T182803-07

Analyte	Result	Reporting Limit	Units	Method	Notes
C29-C40 (MORO)	**14**	10	mg/kg	EPA 8015B	
Arsenic	**24**	5.0	mg/kg	EPA 6010b	
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**23**	2.0	mg/kg	EPA 6010b	
Copper	**40**	1.0	mg/kg	EPA 6010b	
Lead	**13**	3.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Sample ID: B53- 5.0 **Laboratory ID:** T182803-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Nickel	**38**	2.0	mg/kg	EPA 6010b	
Vanadium	**79**	5.0	mg/kg	EPA 6010b	
Zinc	**89**	1.0	mg/kg	EPA 6010b	

Sample ID: B53- 10.0 **Laboratory ID:** T182803-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**36**	5.0	mg/kg	EPA 6010b	
Barium	**210**	1.0	mg/kg	EPA 6010b	
Chromium	**67**	2.0	mg/kg	EPA 6010b	
Cobalt	**31**	2.0	mg/kg	EPA 6010b	
Copper	**53**	1.0	mg/kg	EPA 6010b	
Lead	**16**	3.0	mg/kg	EPA 6010b	
Nickel	**51**	2.0	mg/kg	EPA 6010b	
Vanadium	**120**	5.0	mg/kg	EPA 6010b	
Zinc	**130**	1.0	mg/kg	EPA 6010b	

Sample ID: B53- 15.0 **Laboratory ID:** T182803-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	5.0	mg/kg	EPA 6010b	
Barium	**170**	1.0	mg/kg	EPA 6010b	
Chromium	**45**	2.0	mg/kg	EPA 6010b	
Cobalt	**23**	2.0	mg/kg	EPA 6010b	
Copper	**35**	1.0	mg/kg	EPA 6010b	
Lead	**12**	3.0	mg/kg	EPA 6010b	
Nickel	**34**	2.0	mg/kg	EPA 6010b	
Vanadium	**82**	5.0	mg/kg	EPA 6010b	
Zinc	**89**	1.0	mg/kg	EPA 6010b	

Sample ID: B65- 0.5 **Laboratory ID:** T182803-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**2.6**	0.25	mg/kg	6020 ICP-MS	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Sample ID: B65- 0.5 **Laboratory ID:** T182803-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**4.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B65- 1.5 **Laboratory ID:** T182803-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B65- 5.0 **Laboratory ID:** T182803-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	5.0	mg/kg	EPA 6010b	
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**55**	2.0	mg/kg	EPA 6010b	
Cobalt	**19**	2.0	mg/kg	EPA 6010b	
Copper	**36**	1.0	mg/kg	EPA 6010b	
Lead	**12**	3.0	mg/kg	EPA 6010b	
Nickel	**37**	2.0	mg/kg	EPA 6010b	
Vanadium	**82**	5.0	mg/kg	EPA 6010b	
Zinc	**87**	1.0	mg/kg	EPA 6010b	

Sample ID: B65- 10.0 **Laboratory ID:** T182803-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**25**	5.0	mg/kg	EPA 6010b	
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**44**	2.0	mg/kg	EPA 6010b	
Cobalt	**22**	2.0	mg/kg	EPA 6010b	
Copper	**35**	1.0	mg/kg	EPA 6010b	
Lead	**12**	3.0	mg/kg	EPA 6010b	
Nickel	**33**	2.0	mg/kg	EPA 6010b	
Vanadium	**79**	5.0	mg/kg	EPA 6010b	
Zinc	**72**	1.0	mg/kg	EPA 6010b	

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Kris Kubota, Project Manager Assistant

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949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Sample ID: B65- 15.0 **Laboratory ID:** T182803-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	5.0	mg/kg	EPA 6010b	
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**37**	2.0	mg/kg	EPA 6010b	
Cobalt	**19**	2.0	mg/kg	EPA 6010b	
Copper	**29**	1.0	mg/kg	EPA 6010b	
Lead	**16**	3.0	mg/kg	EPA 6010b	
Nickel	**27**	2.0	mg/kg	EPA 6010b	
Vanadium	**61**	5.0	mg/kg	EPA 6010b	
Zinc	**62**	1.0	mg/kg	EPA 6010b	

Sample ID: B61- 0.5 **Laboratory ID:** T182803-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B61- 1.5 **Laboratory ID:** T182803-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B61- 2.5 **Laboratory ID:** T182803-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B61- 5.0 **Laboratory ID:** T182803-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	5.0	mg/kg	EPA 6010b	
Barium	**140**	1.0	mg/kg	EPA 6010b	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Sample ID: B61- 5.0 **Laboratory ID:** T182803-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Chromium	**41**	2.0	mg/kg	EPA 6010b	
Cobalt	**22**	2.0	mg/kg	EPA 6010b	
Copper	**35**	1.0	mg/kg	EPA 6010b	
Lead	**14**	3.0	mg/kg	EPA 6010b	
Nickel	**37**	2.0	mg/kg	EPA 6010b	
Vanadium	**74**	5.0	mg/kg	EPA 6010b	
Zinc	**80**	1.0	mg/kg	EPA 6010b	

Sample ID: B61- 10.0 **Laboratory ID:** T182803-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**34**	5.0	mg/kg	EPA 6010b	
Barium	**180**	1.0	mg/kg	EPA 6010b	
Chromium	**58**	2.0	mg/kg	EPA 6010b	
Cobalt	**26**	2.0	mg/kg	EPA 6010b	
Copper	**54**	1.0	mg/kg	EPA 6010b	
Lead	**16**	3.0	mg/kg	EPA 6010b	
Nickel	**47**	2.0	mg/kg	EPA 6010b	
Vanadium	**100**	5.0	mg/kg	EPA 6010b	
Zinc	**110**	1.0	mg/kg	EPA 6010b	

Sample ID: B61- 15.0 **Laboratory ID:** T182803-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**36**	2.0	mg/kg	EPA 6010b	
Cobalt	**20**	2.0	mg/kg	EPA 6010b	
Copper	**29**	1.0	mg/kg	EPA 6010b	
Lead	**11**	3.0	mg/kg	EPA 6010b	
Nickel	**28**	2.0	mg/kg	EPA 6010b	
Vanadium	**66**	5.0	mg/kg	EPA 6010b	
Zinc	**64**	1.0	mg/kg	EPA 6010b	

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Sample ID: B02- 5.0 **Laboratory ID:** T182803-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**34**	2.0	mg/kg	EPA 6010b	
Cobalt	**19**	2.0	mg/kg	EPA 6010b	
Copper	**29**	1.0	mg/kg	EPA 6010b	
Lead	**13**	3.0	mg/kg	EPA 6010b	
Nickel	**29**	2.0	mg/kg	EPA 6010b	
Vanadium	**62**	5.0	mg/kg	EPA 6010b	
Zinc	**68**	1.0	mg/kg	EPA 6010b	

Sample ID: B02- 10.0 **Laboratory ID:** T182803-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	5.0	mg/kg	EPA 6010b	
Barium	**100**	1.0	mg/kg	EPA 6010b	
Chromium	**38**	2.0	mg/kg	EPA 6010b	
Cobalt	**19**	2.0	mg/kg	EPA 6010b	
Copper	**28**	1.0	mg/kg	EPA 6010b	
Lead	**9.6**	3.0	mg/kg	EPA 6010b	
Nickel	**30**	2.0	mg/kg	EPA 6010b	
Vanadium	**64**	5.0	mg/kg	EPA 6010b	
Zinc	**61**	1.0	mg/kg	EPA 6010b	

Sample ID: B02- 15.0 **Laboratory ID:** T182803-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	5.0	mg/kg	EPA 6010b	
Barium	**53**	1.0	mg/kg	EPA 6010b	
Chromium	**24**	2.0	mg/kg	EPA 6010b	
Cobalt	**15**	2.0	mg/kg	EPA 6010b	
Copper	**22**	1.0	mg/kg	EPA 6010b	
Nickel	**22**	2.0	mg/kg	EPA 6010b	
Vanadium	**40**	5.0	mg/kg	EPA 6010b	
Zinc	**39**	1.0	mg/kg	EPA 6010b	

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Sample ID: B06- 0.5 **Laboratory ID:** T182803-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.4**	0.25	mg/kg	6020 ICP-MS	
Lead	**21**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B06- 1.5 **Laboratory ID:** T182803-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B06- 2.5 **Laboratory ID:** T182803-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B03- 0.5 **Laboratory ID:** T182803-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	0.25	mg/kg	6020 ICP-MS	
Lead	**18**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B03- 1.5 **Laboratory ID:** T182803-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**300**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B03- 2.5 **Laboratory ID:** T182803-29

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.23	mg/kg	6020 ICP-MS	
Lead	**7.5**	0.23	mg/kg	6020 ICP-MS	

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Sample ID: B07- 0.5 **Laboratory ID:** T182803-30

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**15**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B07- 1.5 **Laboratory ID:** T182803-31

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B07- 2.5 **Laboratory ID:** T182803-32

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B08- 0.5 **Laboratory ID:** T182803-33

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**12**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B08- 1.5 **Laboratory ID:** T182803-34

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B08- 2.5 **Laboratory ID:** T182803-35

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B09- 0.5 **Laboratory ID:** T182803-36

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B09- 1.5 **Laboratory ID:** T182803-37

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B09- 2.5 **Laboratory ID:** T182803-38

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B17- 0.5 **Laboratory ID:** T182803-39

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**29**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B17- 1.5 **Laboratory ID:** T182803-40

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B17- 2.5 **Laboratory ID:** T182803-41

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.0**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B10- 0.5 **Laboratory ID:** T182803-42

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**90**	0.25	mg/kg	6020 ICP-MS	
gamma-Chlordane	**18**	5.0	ug/kg	EPA 8081A	
alpha-Chlordane	**20**	5.0	ug/kg	EPA 8081A	

Sample ID: B10- 1.5 **Laboratory ID:** T182803-43

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B10- 2.5 **Laboratory ID:** T182803-44

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B27- 0.5 **Laboratory ID:** T182803-45

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**55**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B27- 1.5 **Laboratory ID:** T182803-46

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B27- 2.5 **Laboratory ID:** T182803-47

Analyte	Result	Reporting Limit	Units	Method	Notes

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Sample ID: B27- 2.5 **Laboratory ID:** T182803-47

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B16- 0.5 **Laboratory ID:** T182803-48

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B16- 1.5 **Laboratory ID:** T182803-49

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B16- 2.5 **Laboratory ID:** T182803-50

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: EB-02 **Laboratory ID:** T182803-51

Analyte	Result	Reporting Limit	Units	Method	Notes
C6-C12 (GRO)	**96**	50	ug/l	EPA 8015B	
Toluene	**51**	0.50	ug/l	EPA 8260B	

Sample ID: B65- 2.5 **Laboratory ID:** T182803-52

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	

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B57- 5.0

T182803-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	470	ug/kg	1	8091130	09/11/18	09/17/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*79.0 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.3 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**25**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**45**	2.0	"	"	"	"	"	"	
Cobalt	**23**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**15**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**35**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**77**	5.0	"	"	"	"	"	"	
Zinc	**90**	1.0	"	"	"	"	"	"	

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B57- 5.0

T182803-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/14/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8091340	09/13/18	09/17/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.7	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.7	"	"	"	"	"	"	
Bromodichloromethane	ND	4.7	"	"	"	"	"	"	
Bromoform	ND	4.7	"	"	"	"	"	"	
Bromomethane	ND	4.7	"	"	"	"	"	"	
n-Butylbenzene	ND	4.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.7	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Chloroethane	ND	4.7	"	"	"	"	"	"	
Chloroform	ND	4.7	"	"	"	"	"	"	
Chloromethane	ND	4.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.7	"	"	"	"	"	"	
Dibromochloromethane	ND	4.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.4	"	"	"	"	"	"	

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B57- 5.0

T182803-01 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	4.7	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Dibromomethane	ND	4.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.7	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.7	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.7	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.7	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.7	"	"	"	"	"	"	
Isopropylbenzene	ND	4.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.7	"	"	"	"	"	"	
Methylene chloride	ND	4.7	"	"	"	"	"	"	
Naphthalene	ND	4.7	"	"	"	"	"	"	
n-Propylbenzene	ND	4.7	"	"	"	"	"	"	
Styrene	ND	4.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.7	"	"	"	"	"	"	
Tetrachloroethene	ND	4.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.7	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B57- 5.0

T182803-01 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA Method 8260B									
Trichloroethene	ND	4.7	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	4.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.7	"	"	"	"	"	"	
Vinyl chloride	ND	4.7	"	"	"	"	"	"	
Benzene	ND	4.7	"	"	"	"	"	"	
Toluene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.7	"	"	"	"	"	"	
m,p-Xylene	ND	9.4	"	"	"	"	"	"	
o-Xylene	ND	4.7	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.4 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*100 %*	*77.8-142*		"	"	"	"	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

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T182803-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Anthracene	ND	300	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	

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T182803-01 (Soil)

SunStar Laboratories, Inc.

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Hexachlorobenzene	ND	1500	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	
4-Nitroaniline	ND	300	"	"	"	"	"	"	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*53.0 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*55.3 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*56.1 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*68.1 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*74.3 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*95.5 %*	*29.1-130*		"	"	"	"	

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T182803-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8091130	09/11/18	09/17/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*96.0 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*83.1 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**37**	5.0	"	"	"	"	"	"	
Barium	**210**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**69**	2.0	"	"	"	"	"	"	
Cobalt	**30**	2.0	"	"	"	"	"	"	
Copper	**60**	1.0	"	"	"	"	"	"	
Lead	**21**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**55**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**130**	5.0	"	"	"	"	"	"	
Zinc	**130**	1.0	"	"	"	"	"	"	

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T182803-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/14/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8091340	09/13/18	09/17/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*75.8 %*	*35-140*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.0	ug/kg	1	8091129	09/11/18	09/11/18	EPA 8260B/5035	
Bromochloromethane	ND	4.0	"	"	"	"	"	"	
Bromodichloromethane	ND	4.0	"	"	"	"	"	"	
Bromoform	ND	4.0	"	"	"	"	"	"	
Bromomethane	ND	4.0	"	"	"	"	"	"	
n-Butylbenzene	ND	4.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.0	"	"	"	"	"	"	
Chloroethane	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.0	"	"	"	"	"	"	
Chloromethane	ND	4.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.0	"	"	"	"	"	"	
Dibromochloromethane	ND	4.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.9	"	"	"	"	"	"	

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T182803-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	4.0	ug/kg	1	8091129	09/11/18	09/11/18	EPA 8260B/5035	
Dibromomethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.0	"	"	"	"	"	"	
Isopropylbenzene	ND	4.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.0	"	"	"	"	"	"	
Methylene chloride	ND	4.0	"	"	"	"	"	"	
Naphthalene	ND	4.0	"	"	"	"	"	"	
n-Propylbenzene	ND	4.0	"	"	"	"	"	"	
Styrene	ND	4.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	ND	4.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.0	"	"	"	"	"	"	

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B57- 10.0

T182803-02 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA Method 8260B									
Trichloroethene	ND	4.0	ug/kg	1	8091129	09/11/18	09/11/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	4.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.0	"	"	"	"	"	"	
Vinyl chloride	ND	4.0	"	"	"	"	"	"	
Benzene	ND	4.0	"	"	"	"	"	"	
Toluene	ND	4.0	"	"	"	"	"	"	
Ethylbenzene	ND	4.0	"	"	"	"	"	"	
m,p-Xylene	ND	7.9	"	"	"	"	"	"	
o-Xylene	ND	4.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.7 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.2 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*97.9 %*	*77.8-142*		"	"	"	"	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

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T182803-02 (Soil)

SunStar Laboratories, Inc.

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Anthracene	ND	300	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

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T182803-02 (Soil)

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Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Hexachlorobenzene	ND	1500	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	
4-Nitroaniline	ND	300	"	"	"	"	"	"	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*60.5 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*64.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*61.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*71.6 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*77.9 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*	*29.1-130*		"	"	"	"	

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T182803-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	500	ug/kg	1	8091130	09/11/18	09/17/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*74.2 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.0 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**29**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**48**	2.0	"	"	"	"	"	"	
Cobalt	**24**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**15**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**36**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**88**	5.0	"	"	"	"	"	"	
Zinc	**83**	1.0	"	"	"	"	"	"	

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T182803-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/14/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8091340	09/13/18	09/17/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*60.6 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*68.1 %*	*35-140*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.8	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	3.8	"	"	"	"	"	"	
Bromodichloromethane	ND	3.8	"	"	"	"	"	"	
Bromoform	ND	3.8	"	"	"	"	"	"	
Bromomethane	ND	3.8	"	"	"	"	"	"	
n-Butylbenzene	ND	3.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.8	"	"	"	"	"	"	
Chlorobenzene	ND	3.8	"	"	"	"	"	"	
Chloroethane	ND	3.8	"	"	"	"	"	"	
Chloroform	ND	3.8	"	"	"	"	"	"	
Chloromethane	ND	3.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.8	"	"	"	"	"	"	
Dibromochloromethane	ND	3.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.6	"	"	"	"	"	"	

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T182803-03 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	3.8	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Dibromomethane	ND	3.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.8	"	"	"	"	"	"	
1,2-Dichloropropane	ND	3.8	"	"	"	"	"	"	
1,3-Dichloropropane	ND	3.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.8	"	"	"	"	"	"	
Isopropylbenzene	ND	3.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.8	"	"	"	"	"	"	
Methylene chloride	ND	3.8	"	"	"	"	"	"	
Naphthalene	ND	3.8	"	"	"	"	"	"	
n-Propylbenzene	ND	3.8	"	"	"	"	"	"	
Styrene	ND	3.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.8	"	"	"	"	"	"	
Tetrachloroethene	ND	3.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.8	"	"	"	"	"	"	

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T182803-03 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trichloroethene	ND	3.8	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	3.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.8	"	"	"	"	"	"	
Vinyl chloride	ND	3.8	"	"	"	"	"	"	
Benzene	ND	3.8	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	3.8	"	"	"	"	"	"	
m,p-Xylene	ND	7.6	"	"	"	"	"	"	
o-Xylene	ND	3.8	"	"	"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.5 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*77.8-142*		"	"	"	"	

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Carbazole	ND	300	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	

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T182803-03 (Soil)

SunStar Laboratories, Inc.

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Anthracene	ND	300	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	

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T182803-03 (Soil)

SunStar Laboratories, Inc.

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Hexachlorobenzene	ND	1500	ug/kg	1	8091348	09/13/18	09/18/18	EPA 8270C	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	
4-Nitroaniline	ND	300	"	"	"	"	"	"	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*58.8 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*62.7 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*60.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*68.7 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*74.8 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*96.7 %*	*29.1-130*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B53- 0.5

T182803-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**27**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*88.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*37.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B53- 1.5

T182803-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.23	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**7.8**	0.23	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*82.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*40.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B53- 2.5

T182803-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*83.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*38.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B53- 5.0

T182803-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	420	ug/kg	1	8091130	09/11/18	09/17/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*68.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	**14**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*85.3 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**24**	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	09/14/18	"	
Cadmium	ND	2.0	"	"	"	"	09/14/18	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**23**	2.0	"	"	"	"	"	"	
Copper	**40**	1.0	"	"	"	"	"	"	
Lead	**13**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**38**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**79**	5.0	"	"	"	"	"	"	
Zinc	**89**	1.0	"	"	"	"	"	"	

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B53- 5.0

T182803-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/14/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.0	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.0	"	"	"	"	"	"	
Bromodichloromethane	ND	4.0	"	"	"	"	"	"	
Bromoform	ND	4.0	"	"	"	"	"	"	
Bromomethane	ND	4.0	"	"	"	"	"	"	
n-Butylbenzene	ND	4.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.0	"	"	"	"	"	"	
Chloroethane	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.0	"	"	"	"	"	"	
Chloromethane	ND	4.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.0	"	"	"	"	"	"	
Dibromochloromethane	ND	4.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.0	"	"	"	"	"	"	
Dibromomethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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T182803-07 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.0	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.0	"	"	"	"	"	"	
Isopropylbenzene	ND	4.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.0	"	"	"	"	"	"	
Methylene chloride	ND	4.0	"	"	"	"	"	"	
Naphthalene	ND	4.0	"	"	"	"	"	"	
n-Propylbenzene	ND	4.0	"	"	"	"	"	"	
Styrene	ND	4.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	ND	4.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.0	"	"	"	"	"	"	
Trichloroethene	ND	4.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.0	"	"	"	"	"	"	
Vinyl chloride	ND	4.0	"	"	"	"	"	"	
Benzene	ND	4.0	"	"	"	"	"	"	
Toluene	ND	4.0	"	"	"	"	"	"	
Ethylbenzene	ND	4.0	"	"	"	"	"	"	
m,p-Xylene	ND	8.1	"	"	"	"	"	"	
o-Xylene	ND	4.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B53- 5.0

T182803-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*		*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*92.9 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*111 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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B53- 10.0

T182803-08 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	450	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*78.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*76.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**36**	5.0	"	"	"	"	"	"	
Barium	**210**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**67**	2.0	"	"	"	"	"	"	
Cobalt	**31**	2.0	"	"	"	"	"	"	
Copper	**53**	1.0	"	"	"	"	"	"	
Lead	**16**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**51**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**120**	5.0	"	"	"	"	"	"	
Zinc	**130**	1.0	"	"	"	"	"	"	

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B53- 10.0

T182803-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/14/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.5	"	"	"	"	"	"	
Bromodichloromethane	ND	4.5	"	"	"	"	"	"	
Bromoform	ND	4.5	"	"	"	"	"	"	
Bromomethane	ND	4.5	"	"	"	"	"	"	
n-Butylbenzene	ND	4.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.5	"	"	"	"	"	"	
Chlorobenzene	ND	4.5	"	"	"	"	"	"	
Chloroethane	ND	4.5	"	"	"	"	"	"	
Chloroform	ND	4.5	"	"	"	"	"	"	
Chloromethane	ND	4.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
Dibromochloromethane	ND	4.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.5	"	"	"	"	"	"	
Dibromomethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B53- 10.0

T182803-08 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.5	"	"	"	"	"	"	
Isopropylbenzene	ND	4.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.5	"	"	"	"	"	"	
Methylene chloride	ND	4.5	"	"	"	"	"	"	
Naphthalene	ND	4.5	"	"	"	"	"	"	
n-Propylbenzene	ND	4.5	"	"	"	"	"	"	
Styrene	ND	4.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
Tetrachloroethene	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.5	"	"	"	"	"	"	
Trichloroethene	ND	4.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
Vinyl chloride	ND	4.5	"	"	"	"	"	"	
Benzene	ND	4.5	"	"	"	"	"	"	
Toluene	ND	4.5	"	"	"	"	"	"	
Ethylbenzene	ND	4.5	"	"	"	"	"	"	
m,p-Xylene	ND	8.9	"	"	"	"	"	"	
o-Xylene	ND	4.5	"	"	"	"	"	"	

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B53- 10.0

T182803-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*105 %*		*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*88.4 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*112 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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B53- 15.0

T182803-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	440	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*45.0 %*	*65-135*		*"*	*"*	*"*	*"*	*S-03*
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.0 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**23**	5.0	"	"	"	"	"	"	
Barium	**170**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**45**	2.0	"	"	"	"	"	"	
Cobalt	**23**	2.0	"	"	"	"	"	"	
Copper	**35**	1.0	"	"	"	"	"	"	
Lead	**12**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**34**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**82**	5.0	"	"	"	"	"	"	
Zinc	**89**	1.0	"	"	"	"	"	"	

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B53- 15.0

T182803-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.5	"	"	"	"	"	"	
Bromodichloromethane	ND	4.5	"	"	"	"	"	"	
Bromoform	ND	4.5	"	"	"	"	"	"	
Bromomethane	ND	4.5	"	"	"	"	"	"	
n-Butylbenzene	ND	4.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.5	"	"	"	"	"	"	
Chlorobenzene	ND	4.5	"	"	"	"	"	"	
Chloroethane	ND	4.5	"	"	"	"	"	"	
Chloroform	ND	4.5	"	"	"	"	"	"	
Chloromethane	ND	4.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
Dibromochloromethane	ND	4.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.5	"	"	"	"	"	"	
Dibromomethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	

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B53- 15.0

T182803-09 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.5	"	"	"	"	"	"	
Isopropylbenzene	ND	4.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.5	"	"	"	"	"	"	
Methylene chloride	ND	4.5	"	"	"	"	"	"	
Naphthalene	ND	4.5	"	"	"	"	"	"	
n-Propylbenzene	ND	4.5	"	"	"	"	"	"	
Styrene	ND	4.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
Tetrachloroethene	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.5	"	"	"	"	"	"	
Trichloroethene	ND	4.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
Vinyl chloride	ND	4.5	"	"	"	"	"	"	
Benzene	ND	4.5	"	"	"	"	"	"	
Toluene	ND	4.5	"	"	"	"	"	"	
Ethylbenzene	ND	4.5	"	"	"	"	"	"	
m,p-Xylene	ND	8.9	"	"	"	"	"	"	
o-Xylene	ND	4.5	"	"	"	"	"	"	

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B53- 15.0

T182803-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Surrogate: Toluene-d8	*100 %*	*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene	*90.4 %*	*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane	*107 %*	*77.8-142*	*"*	*"*	*"*	*"*	

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B65- 0.5

T182803-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**2.6**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**4.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*84.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*47.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B65- 1.5

T182803-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**9.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*95.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*51.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B65- 5.0

T182803-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	360	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*68.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**19**	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**55**	2.0	"	"	"	"	"	"	
Cobalt	**19**	2.0	"	"	"	"	"	"	
Copper	**36**	1.0	"	"	"	"	"	"	
Lead	**12**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**37**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**82**	5.0	"	"	"	"	"	"	
Zinc	**87**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 5.0

T182803-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.7	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	5.7	"	"	"	"	"	"	
Bromodichloromethane	ND	5.7	"	"	"	"	"	"	
Bromoform	ND	5.7	"	"	"	"	"	"	
Bromomethane	ND	5.7	"	"	"	"	"	"	
n-Butylbenzene	ND	5.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.7	"	"	"	"	"	"	
Chlorobenzene	ND	5.7	"	"	"	"	"	"	
Chloroethane	ND	5.7	"	"	"	"	"	"	
Chloroform	ND	5.7	"	"	"	"	"	"	
Chloromethane	ND	5.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.7	"	"	"	"	"	"	
Dibromochloromethane	ND	5.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.7	"	"	"	"	"	"	
Dibromomethane	ND	5.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.7	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.7	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.7	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 5.0

T182803-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.7	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.7	"	"	"	"	"	"	
Isopropylbenzene	ND	5.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.7	"	"	"	"	"	"	
Methylene chloride	ND	5.7	"	"	"	"	"	"	
Naphthalene	ND	5.7	"	"	"	"	"	"	
n-Propylbenzene	ND	5.7	"	"	"	"	"	"	
Styrene	ND	5.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.7	"	"	"	"	"	"	
Tetrachloroethene	ND	5.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.7	"	"	"	"	"	"	
Trichloroethene	ND	5.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.7	"	"	"	"	"	"	
Vinyl chloride	ND	5.7	"	"	"	"	"	"	
Benzene	ND	5.7	"	"	"	"	"	"	
Toluene	ND	5.7	"	"	"	"	"	"	
Ethylbenzene	ND	5.7	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.7	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 5.0

T182803-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*89.1 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*105 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 10.0

T182803-13 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	500	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*59.3 %*	*65-135*		*"*	*"*	*"*	*"*	*S-03*
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*94.6 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**25**	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**44**	2.0	"	"	"	"	"	"	
Cobalt	**22**	2.0	"	"	"	"	"	"	
Copper	**35**	1.0	"	"	"	"	"	"	
Lead	**12**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**33**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**79**	5.0	"	"	"	"	"	"	
Zinc	**72**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 10.0

T182803-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.4	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.4	"	"	"	"	"	"	
Bromodichloromethane	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	4.4	"	"	"	"	"	"	
Bromomethane	ND	4.4	"	"	"	"	"	"	
n-Butylbenzene	ND	4.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.4	"	"	"	"	"	"	
Chlorobenzene	ND	4.4	"	"	"	"	"	"	
Chloroethane	ND	4.4	"	"	"	"	"	"	
Chloroform	ND	4.4	"	"	"	"	"	"	
Chloromethane	ND	4.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
Dibromochloromethane	ND	4.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.8	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.4	"	"	"	"	"	"	
Dibromomethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 10.0

T182803-13 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.4	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.4	"	"	"	"	"	"	
Isopropylbenzene	ND	4.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.4	"	"	"	"	"	"	
Methylene chloride	ND	4.4	"	"	"	"	"	"	
Naphthalene	ND	4.4	"	"	"	"	"	"	
n-Propylbenzene	ND	4.4	"	"	"	"	"	"	
Styrene	ND	4.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
Tetrachloroethene	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.4	"	"	"	"	"	"	
Trichloroethene	ND	4.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
Vinyl chloride	ND	4.4	"	"	"	"	"	"	
Benzene	ND	4.4	"	"	"	"	"	"	
Toluene	ND	4.4	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 10.0

T182803-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*100 %*	*76.1-127*		*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*86.5 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*106 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 15.0

T182803-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	390	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*92.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**19**	5.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**37**	2.0	"	"	"	"	"	"	
Cobalt	**19**	2.0	"	"	"	"	"	"	
Copper	**29**	1.0	"	"	"	"	"	"	
Lead	**16**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**27**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**61**	5.0	"	"	"	"	"	"	
Zinc	**62**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 15.0

T182803-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.6	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	3.6	"	"	"	"	"	"	
Bromodichloromethane	ND	3.6	"	"	"	"	"	"	
Bromoform	ND	3.6	"	"	"	"	"	"	
Bromomethane	ND	3.6	"	"	"	"	"	"	
n-Butylbenzene	ND	3.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.6	"	"	"	"	"	"	
Chlorobenzene	ND	3.6	"	"	"	"	"	"	
Chloroethane	ND	3.6	"	"	"	"	"	"	
Chloroform	ND	3.6	"	"	"	"	"	"	
Chloromethane	ND	3.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	3.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.2	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.6	"	"	"	"	"	"	
Dibromomethane	ND	3.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.6	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.6	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.6	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 15.0

T182803-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.6	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.6	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.6	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.6	"	"	"	"	"	"	
Isopropylbenzene	ND	3.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.6	"	"	"	"	"	"	
Methylene chloride	ND	3.6	"	"	"	"	"	"	
Naphthalene	ND	3.6	"	"	"	"	"	"	
n-Propylbenzene	ND	3.6	"	"	"	"	"	"	
Styrene	ND	3.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.6	"	"	"	"	"	"	
Tetrachloroethene	ND	3.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.6	"	"	"	"	"	"	
Trichloroethene	ND	3.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	3.6	"	"	"	"	"	"	
Benzene	ND	3.6	"	"	"	"	"	"	
Toluene	ND	3.6	"	"	"	"	"	"	
Ethylbenzene	ND	3.6	"	"	"	"	"	"	
m,p-Xylene	ND	7.2	"	"	"	"	"	"	
o-Xylene	ND	3.6	"	"	"	"	"	"	

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B65- 15.0

T182803-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*89.7 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*109 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B61- 0.5

T182803-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**8.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*91.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*45.6 %*	*35-140*		"	"	"	"	

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B61- 1.5

T182803-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**8.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*82.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*49.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B61- 2.5

T182803-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*85.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*51.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B61- 5.0

T182803-18 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	520	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*93.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*95.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**21**	5.0	"	"	"	"	"	"	
Barium	**140**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**41**	2.0	"	"	"	"	"	"	
Cobalt	**22**	2.0	"	"	"	"	"	"	
Copper	**35**	1.0	"	"	"	"	"	"	
Lead	**14**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**37**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**74**	5.0	"	"	"	"	"	"	
Zinc	**80**	1.0	"	"	"	"	"	"	

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B61- 5.0

T182803-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.9	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.9	"	"	"	"	"	"	
Bromodichloromethane	ND	4.9	"	"	"	"	"	"	
Bromoform	ND	4.9	"	"	"	"	"	"	
Bromomethane	ND	4.9	"	"	"	"	"	"	
n-Butylbenzene	ND	4.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.9	"	"	"	"	"	"	
Chlorobenzene	ND	4.9	"	"	"	"	"	"	
Chloroethane	ND	4.9	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
Chloromethane	ND	4.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.9	"	"	"	"	"	"	
Dibromochloromethane	ND	4.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.9	"	"	"	"	"	"	
Dibromomethane	ND	4.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.9	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.9	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.9	"	"	"	"	"	"	

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B61- 5.0

T182803-18 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.9	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.9	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.9	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.9	"	"	"	"	"	"	
Isopropylbenzene	ND	4.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.9	"	"	"	"	"	"	
Methylene chloride	ND	4.9	"	"	"	"	"	"	
Naphthalene	ND	4.9	"	"	"	"	"	"	
n-Propylbenzene	ND	4.9	"	"	"	"	"	"	
Styrene	ND	4.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.9	"	"	"	"	"	"	
Tetrachloroethene	ND	4.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.9	"	"	"	"	"	"	
Trichloroethene	ND	4.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.9	"	"	"	"	"	"	
Vinyl chloride	ND	4.9	"	"	"	"	"	"	
Benzene	ND	4.9	"	"	"	"	"	"	
Toluene	ND	4.9	"	"	"	"	"	"	
Ethylbenzene	ND	4.9	"	"	"	"	"	"	
m,p-Xylene	ND	9.7	"	"	"	"	"	"	
o-Xylene	ND	4.9	"	"	"	"	"	"	

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B61- 5.0

T182803-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*		*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*91.6 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*111 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 10.0

T182803-19 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	540	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*81.1 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*100 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**34**	5.0	"	"	"	"	"	"	
Barium	**180**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**58**	2.0	"	"	"	"	"	"	
Cobalt	**26**	2.0	"	"	"	"	"	"	
Copper	**54**	1.0	"	"	"	"	"	"	
Lead	**16**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**47**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**100**	5.0	"	"	"	"	"	"	
Zinc	**110**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 10.0

T182803-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	6.9	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	6.9	"	"	"	"	"	"	
Bromodichloromethane	ND	6.9	"	"	"	"	"	"	
Bromoform	ND	6.9	"	"	"	"	"	"	
Bromomethane	ND	6.9	"	"	"	"	"	"	
n-Butylbenzene	ND	6.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.9	"	"	"	"	"	"	
Chlorobenzene	ND	6.9	"	"	"	"	"	"	
Chloroethane	ND	6.9	"	"	"	"	"	"	
Chloroform	ND	6.9	"	"	"	"	"	"	
Chloromethane	ND	6.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.9	"	"	"	"	"	"	
Dibromochloromethane	ND	6.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	14	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.9	"	"	"	"	"	"	
Dibromomethane	ND	6.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.9	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.9	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.9	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 10.0

T182803-19 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	6.9	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	6.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.9	"	"	"	"	"	"	
1,1-Dichloropropene	ND	6.9	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	6.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.9	"	"	"	"	"	"	
Isopropylbenzene	ND	6.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.9	"	"	"	"	"	"	
Methylene chloride	ND	6.9	"	"	"	"	"	"	
Naphthalene	ND	6.9	"	"	"	"	"	"	
n-Propylbenzene	ND	6.9	"	"	"	"	"	"	
Styrene	ND	6.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.9	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.9	"	"	"	"	"	"	
Trichloroethene	ND	6.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.9	"	"	"	"	"	"	
Vinyl chloride	ND	6.9	"	"	"	"	"	"	
Benzene	ND	6.9	"	"	"	"	"	"	
Toluene	ND	6.9	"	"	"	"	"	"	
Ethylbenzene	ND	6.9	"	"	"	"	"	"	
m,p-Xylene	ND	14	"	"	"	"	"	"	
o-Xylene	ND	6.9	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 10.0

T182803-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*89.2 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*108 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 15.0

T182803-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	450	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*80.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*86.1 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**36**	2.0	"	"	"	"	"	"	
Cobalt	**20**	2.0	"	"	"	"	"	"	
Copper	**29**	1.0	"	"	"	"	"	"	
Lead	**11**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**28**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**66**	5.0	"	"	"	"	"	"	
Zinc	**64**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 15.0

T182803-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.9	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	3.9	"	"	"	"	"	"	
Bromodichloromethane	ND	3.9	"	"	"	"	"	"	
Bromoform	ND	3.9	"	"	"	"	"	"	
Bromomethane	ND	3.9	"	"	"	"	"	"	
n-Butylbenzene	ND	3.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.9	"	"	"	"	"	"	
Chlorobenzene	ND	3.9	"	"	"	"	"	"	
Chloroethane	ND	3.9	"	"	"	"	"	"	
Chloroform	ND	3.9	"	"	"	"	"	"	
Chloromethane	ND	3.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
Dibromochloromethane	ND	3.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.9	"	"	"	"	"	"	
Dibromomethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.9	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 15.0

T182803-20 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	3.9	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.9	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.9	"	"	"	"	"	"	
Isopropylbenzene	ND	3.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.9	"	"	"	"	"	"	
Methylene chloride	ND	3.9	"	"	"	"	"	"	
Naphthalene	ND	3.9	"	"	"	"	"	"	
n-Propylbenzene	ND	3.9	"	"	"	"	"	"	
Styrene	ND	3.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
Tetrachloroethene	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.9	"	"	"	"	"	"	
Trichloroethene	ND	3.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
Vinyl chloride	ND	3.9	"	"	"	"	"	"	
Benzene	ND	3.9	"	"	"	"	"	"	
Toluene	ND	3.9	"	"	"	"	"	"	
Ethylbenzene	ND	3.9	"	"	"	"	"	"	
m,p-Xylene	ND	7.9	"	"	"	"	"	"	
o-Xylene	ND	3.9	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B61- 15.0

T182803-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*90.4 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*101 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 5.0

T182803-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	450	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*87.3 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**21**	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	09/14/18	"	
Cadmium	ND	2.0	"	"	"	"	09/14/18	"	
Chromium	**34**	2.0	"	"	"	"	"	"	
Cobalt	**19**	2.0	"	"	"	"	"	"	
Copper	**29**	1.0	"	"	"	"	"	"	
Lead	**13**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**29**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**62**	5.0	"	"	"	"	"	"	
Zinc	**68**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 5.0

T182803-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.5	"	"	"	"	"	"	
Bromodichloromethane	ND	4.5	"	"	"	"	"	"	
Bromoform	ND	4.5	"	"	"	"	"	"	
Bromomethane	ND	4.5	"	"	"	"	"	"	
n-Butylbenzene	ND	4.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.5	"	"	"	"	"	"	
Chlorobenzene	ND	4.5	"	"	"	"	"	"	
Chloroethane	ND	4.5	"	"	"	"	"	"	
Chloroform	ND	4.5	"	"	"	"	"	"	
Chloromethane	ND	4.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
Dibromochloromethane	ND	4.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.5	"	"	"	"	"	"	
Dibromomethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 5.0

T182803-21 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.5	"	"	"	"	"	"	
Isopropylbenzene	ND	4.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.5	"	"	"	"	"	"	
Methylene chloride	ND	4.5	"	"	"	"	"	"	
Naphthalene	ND	4.5	"	"	"	"	"	"	
n-Propylbenzene	ND	4.5	"	"	"	"	"	"	
Styrene	ND	4.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
Tetrachloroethene	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.5	"	"	"	"	"	"	
Trichloroethene	ND	4.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
Vinyl chloride	ND	4.5	"	"	"	"	"	"	
Benzene	ND	4.5	"	"	"	"	"	"	
Toluene	ND	4.5	"	"	"	"	"	"	
Ethylbenzene	ND	4.5	"	"	"	"	"	"	
m,p-Xylene	ND	8.9	"	"	"	"	"	"	
o-Xylene	ND	4.5	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 5.0

T182803-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*		*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*86.0 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*109 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 10.0

T182803-22 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	450	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*105 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*95.1 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**19**	5.0	"	"	"	"	"	"	
Barium	**100**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**38**	2.0	"	"	"	"	"	"	
Cobalt	**19**	2.0	"	"	"	"	"	"	
Copper	**28**	1.0	"	"	"	"	"	"	
Lead	**9.6**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**30**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**64**	5.0	"	"	"	"	"	"	
Zinc	**61**	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 10.0

T182803-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.6	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	4.6	"	"	"	"	"	"	
Bromodichloromethane	ND	4.6	"	"	"	"	"	"	
Bromoform	ND	4.6	"	"	"	"	"	"	
Bromomethane	ND	4.6	"	"	"	"	"	"	
n-Butylbenzene	ND	4.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.6	"	"	"	"	"	"	
Chlorobenzene	ND	4.6	"	"	"	"	"	"	
Chloroethane	ND	4.6	"	"	"	"	"	"	
Chloroform	ND	4.6	"	"	"	"	"	"	
Chloromethane	ND	4.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
Dibromochloromethane	ND	4.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.2	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.6	"	"	"	"	"	"	
Dibromomethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.6	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 10.0

T182803-22 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.6	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.6	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.6	"	"	"	"	"	"	
Isopropylbenzene	ND	4.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.6	"	"	"	"	"	"	
Methylene chloride	ND	4.6	"	"	"	"	"	"	
Naphthalene	ND	4.6	"	"	"	"	"	"	
n-Propylbenzene	ND	4.6	"	"	"	"	"	"	
Styrene	ND	4.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
Tetrachloroethene	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.6	"	"	"	"	"	"	
Trichloroethene	ND	4.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
Vinyl chloride	ND	4.6	"	"	"	"	"	"	
Benzene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	4.6	"	"	"	"	"	"	
Ethylbenzene	ND	4.6	"	"	"	"	"	"	
m,p-Xylene	ND	9.2	"	"	"	"	"	"	
o-Xylene	ND	4.6	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 10.0

T182803-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Surrogate: Toluene-d8	*104 %*	*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene	*90.9 %*	*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane	*110 %*	*77.8-142*	*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 15.0

T182803-23 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	600	ug/kg	1	8091130	09/11/18	09/18/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*97.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8091232	09/12/18	09/14/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8091404	09/14/18	09/14/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**21**	5.0	"	"	"	"	"	"	
Barium	**53**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**24**	2.0	"	"	"	"	"	"	
Cobalt	**15**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**22**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**40**	5.0	"	"	"	"	"	"	
Zinc	**39**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 15.0

T182803-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8091405	09/14/18	09/17/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
Bromochloromethane	ND	5.5	"	"	"	"	"	"	
Bromodichloromethane	ND	5.5	"	"	"	"	"	"	
Bromoform	ND	5.5	"	"	"	"	"	"	
Bromomethane	ND	5.5	"	"	"	"	"	"	
n-Butylbenzene	ND	5.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.5	"	"	"	"	"	"	
Chlorobenzene	ND	5.5	"	"	"	"	"	"	
Chloroethane	ND	5.5	"	"	"	"	"	"	
Chloroform	ND	5.5	"	"	"	"	"	"	
Chloromethane	ND	5.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.5	"	"	"	"	"	"	
Dibromochloromethane	ND	5.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.5	"	"	"	"	"	"	
Dibromomethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.5	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 15.0

T182803-23 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	5.5	ug/kg	1	8091129	09/11/18	09/12/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.5	"	"	"	"	"	"	
Isopropylbenzene	ND	5.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.5	"	"	"	"	"	"	
Methylene chloride	ND	5.5	"	"	"	"	"	"	
Naphthalene	ND	5.5	"	"	"	"	"	"	
n-Propylbenzene	ND	5.5	"	"	"	"	"	"	
Styrene	ND	5.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.5	"	"	"	"	"	"	
Tetrachloroethene	ND	5.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	5.5	"	"	"	"	"	"	
Benzene	ND	5.5	"	"	"	"	"	"	
Toluene	ND	5.5	"	"	"	"	"	"	
Ethylbenzene	ND	5.5	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.5	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B02- 15.0

T182803-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*103 %*		*76.1-127*	*8091129*	*09/11/18*	*09/12/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*87.7 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*108 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B06- 0.5

T182803-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**8.4**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**21**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*82.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*46.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B06- 1.5

T182803-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*80.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*39.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B06- 2.5

T182803-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*37.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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B03- 0.5

T182803-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**23**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**18**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*38.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B03- 1.5

T182803-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**300**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*90.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*28.3 %*	*35-140*		*"*	*"*	*"*	*"*	*S-GC*

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B03- 2.5

T182803-29 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.23	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**7.5**	0.23	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*29.3 %*	*35-140*		*"*	*"*	*"*	*"*	*S-GC*

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B07- 0.5

T182803-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**15**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*30.7 %*	*35-140*		*"*	*"*	*"*	*"*	*S-GC*

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B07- 1.5

T182803-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**9.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*82.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*30.5 %*	*35-140*		*"*	*"*	*"*	*"*	*S-GC*

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B07- 2.5

T182803-32 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**7.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*86.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*31.3 %*	*35-140*		*"*	*"*	*"*	*"*	*S-GC*

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B08- 0.5

T182803-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**12**	0.25	mg/kg	1	8091241	09/12/18	09/13/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*30.4 %*	*35-140*		*"*	*"*	*"*	*"*	*S-GC*

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B08- 1.5

T182803-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091319	09/13/18	09/17/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*86.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*35.4 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B08- 2.5

T182803-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*78.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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B09- 0.5

T182803-36 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*79.9 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B09- 1.5

T182803-37 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**9.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*80.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B09- 2.5

T182803-38 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**8.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B17- 0.5

T182803-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**29**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B17- 1.5

T182803-40 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**8.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*97.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B17- 2.5

T182803-41 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**23**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**9.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*86.9 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B10- 0.5

T182803-42 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**90**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	**18**	5.0	"	"	"	"	"	"	
alpha-Chlordane	**20**	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*79.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*76.2 %*	*35-140*		"	"	"	"	

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B10- 1.5

T182803-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*102 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B10- 2.5

T182803-44 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**9.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*72.7 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B27- 0.5

T182803-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**55**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*81.0 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*117 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B27- 1.5

T182803-46 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**9.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*81.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*81.9 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B27- 2.5

T182803-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**7.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B16- 0.5

T182803-48 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**5.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*73.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.2 %*	*35-140*		*"*	*"*	*"*	*"*	

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B16- 1.5

T182803-49 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**8.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B16- 2.5

T182803-50 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**7.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/16/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*71.9 %*	*35-140*		"	"	"	"	

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EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	**96**	50	ug/l	1	8091148	09/11/18	09/12/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8091225	09/12/18	09/13/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*89.9 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8091325	09/13/18	09/14/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	"	"	
Cadmium	ND	50	"	"	"	"	"	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	1.0	ug/l	1	8091324	09/13/18	09/13/18	6020 ICP-MS	
Lead	ND	2.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8091326	09/13/18	09/17/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8091141	09/11/18	09/12/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.3 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*81.6 %*		*35-140*	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	2.00	ug/l	1	8091401	09/14/18	09/17/18	EPA 8082	
PCB-1221	ND	2.00	"	"	"	"	"	"	
PCB-1232	ND	2.00	"	"	"	"	"	"	
PCB-1242	ND	2.00	"	"	"	"	"	"	
PCB-1248	ND	2.00	"	"	"	"	"	"	
PCB-1254	ND	2.00	"	"	"	"	"	"	
PCB-1260	ND	2.00	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*53.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*96.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8091127	09/11/18	09/12/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,4-Dichlorobenzene	ND	1.0	ug/l	1	8091127	09/11/18	09/12/18	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Vinyl chloride	ND	1.0	ug/l	1	8091127	09/11/18	09/12/18	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**51**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.6 %*	*92.6-108*		"	"	"	"	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	10	ug/l	1	8091121	09/11/18	09/11/18	EPA 8270C	
Phenol	ND	10	"	"	"	"	"	"	
Aniline	ND	10	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
Acenaphthylene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	20	"	"	"	"	"	"	
1-Methylnaphthalene	ND	10	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	10	"	"	"	"	"	"	
Acenaphthene	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	20	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Benzo (a) pyrene	ND	10	ug/l	1	8091121	09/11/18	09/11/18	EPA 8270C	
Benzyl alcohol	ND	50	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	20	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	20	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	20	"	"	"	"	"	"	
Chrysene	ND	10	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	20	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
Diethyl phthalate	ND	10	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	10	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	5.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	20	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	20	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	20	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

EB-02

T182803-51 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Isophorone	ND	10	ug/l	1	8091121	09/11/18	09/11/18	EPA 8270C	
2-Methylphenol	ND	10	"	"	"	"	"	"	
4-Methylphenol	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	20	"	"	"	"	"	"	
2-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	25	"	"	"	"	"	"	
Phenanthrene	ND	10	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	20	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
1,4-Dinitrobenzene	ND	10	"	"	"	"	"	"	
Pyridine	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*50.2 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*45.7 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*68.6 %*	*14.7-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*74.7 %*	*33.3-110*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*85.2 %*	*12.9-110*		"	"	"	"	
Surrogate: Terphenyl-dl4		*86.7 %*	*15.8-136*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

B65- 2.5

T182803-52 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8091321	09/13/18	09/13/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8091336	09/13/18	09/18/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.9 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091130 - EPA 5035 GC										
Blank (8091130-BLK1)				Prepared: 09/11/18 Analyzed: 09/17/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*101*		*"*	*100*		*101*	*65-135*			
LCS (8091130-BS1)				Prepared: 09/11/18 Analyzed: 09/17/18						
C6-C12 (GRO)	1970	500	ug/kg	1990		99.0	75-125			
Surrogate: 4-Bromofluorobenzene	*102*		*"*	*100*		*102*	*65-135*			
LCS Dup (8091130-BSD1)				Prepared: 09/11/18 Analyzed: 09/17/18						
C6-C12 (GRO)	2110	500	ug/kg	1990		106	75-125	6.82	20	
Surrogate: 4-Bromofluorobenzene	*97.2*		*"*	*100*		*97.2*	*65-135*			
Batch 8091148 - EPA 5030 GC										
Blank (8091148-BLK1)				Prepared: 09/11/18 Analyzed: 09/12/18						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*102*		*"*	*100*		*102*	*65-135*			
LCS (8091148-BS1)				Prepared: 09/11/18 Analyzed: 09/12/18						
C6-C12 (GRO)	777	50	ug/l	996		78.1	75-125			
Surrogate: 4-Bromofluorobenzene	*90.9*		*"*	*100*		*90.9*	*65-135*			
LCS Dup (8091148-BSD1)				Prepared: 09/11/18 Analyzed: 09/12/18						
C6-C12 (GRO)	897	50	ug/l	996		90.1	75-125	14.3	20	
Surrogate: 4-Bromofluorobenzene	*83.6*		*"*	*100*		*83.6*	*65-135*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091225 - EPA 3510C GC										
Blank (8091225-BLK1)				Prepared: 09/12/18 Analyzed: 09/13/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*3.33*		*"*	*4.00*		*83.2*	*65-135*			
LCS (8091225-BS1)				Prepared: 09/12/18 Analyzed: 09/13/18						
C13-C28 (DRO)	17.7	0.50	mg/l	20.0		88.7	75-125			
Surrogate: p-Terphenyl	*3.76*		*"*	*4.00*		*93.9*	*65-135*			
LCS Dup (8091225-BSD1)				Prepared: 09/12/18 Analyzed: 09/13/18						
C13-C28 (DRO)	17.8	0.50	mg/l	20.0		88.9	75-125	0.212	20	
Surrogate: p-Terphenyl	*3.67*		*"*	*4.00*		*91.8*	*65-135*			
Batch 8091232 - EPA 3550B GC										
Blank (8091232-BLK1)				Prepared: 09/12/18 Analyzed: 09/14/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*87.9*		*"*	*100*		*87.9*	*65-135*			
LCS (8091232-BS1)				Prepared: 09/12/18 Analyzed: 09/14/18						
C13-C28 (DRO)	430	10	mg/kg	500		85.7	75-125			
Surrogate: p-Terphenyl	*87.5*		*"*	*100*		*87.5*	*65-135*			
LCS Dup (8091232-BSD1)				Prepared: 09/12/18 Analyzed: 09/14/18						
C13-C28 (DRO)	430	10	mg/kg	500		85.6	75-125	0.0579	20	
Surrogate: p-Terphenyl	*87.9*		*"*	*100*		*87.9*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091325 - EPA 3010A										
Blank (8091325-BLK1)				Prepared: 09/13/18 Analyzed: 09/14/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8091325-BS1)				Prepared: 09/13/18 Analyzed: 09/14/18						
Arsenic	444	50	ug/l	500		88.9	75-125			
Barium	465	50	"	500		93.1	75-125			
Cadmium	458	50	"	500		91.6	75-125			
Chromium	471	50	"	500		94.1	75-125			
Lead	478	50	"	500		95.5	75-125			
Matrix Spike (8091325-MS1)	**Source: T182803-51**			Prepared: 09/13/18 Analyzed: 09/14/18						
Arsenic	465	50	ug/l	500	ND	92.9	75-125			
Barium	494	50	"	500	ND	98.8	75-125			
Cadmium	487	50	"	500	ND	97.4	75-125			
Chromium	499	50	"	500	ND	99.8	75-125			
Lead	489	50	"	500	ND	97.7	75-125			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091325 - EPA 3010A										
Matrix Spike Dup (8091325-MSD1)		**Source: T182803-51**		Prepared: 09/13/18 Analyzed: 09/14/18						
Arsenic	471	50	ug/l	500	ND	94.2	75-125	1.42	20	
Barium	481	50	"	500	ND	96.2	75-125	2.73	20	
Cadmium	474	50	"	500	ND	94.7	75-125	2.76	20	
Chromium	487	50	"	500	ND	97.4	75-125	2.45	20	
Lead	478	50	"	500	ND	95.6	75-125	2.17	20	
Batch 8091404 - EPA 3050B										
Blank (8091404-BLK1)				Prepared & Analyzed: 09/14/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8091404-BS1)				Prepared & Analyzed: 09/14/18						
Arsenic	107	5.0	mg/kg	100		107	75-125			
Barium	108	1.0	"	100		108	75-125			
Cadmium	108	2.0	"	100		108	75-125			
Chromium	108	2.0	"	100		108	75-125			
Lead	109	3.0	"	100		109	75-125			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091404 - EPA 3050B										
Matrix Spike (8091404-MS1)		**Source: T182803-01**		Prepared & Analyzed: 09/14/18						
Arsenic	95.0	5.0	mg/kg	96.2	25.5	72.3	75-125			QR-04
Barium	197	1.0	"	96.2	148	50.7	75-125			QM-07
Cadmium	91.2	2.0	"	96.2	ND	94.8	75-125			
Chromium	116	2.0	"	96.2	44.6	74.5	75-125			QR-04
Lead	93.1	3.0	"	96.2	15.0	81.2	75-125			
Matrix Spike Dup (8091404-MSD1)		**Source: T182803-01**		Prepared & Analyzed: 09/14/18						
Arsenic	100	5.0	mg/kg	95.2	25.5	78.7	75-125	5.57	20	
Barium	206	1.0	"	95.2	148	60.8	75-125	4.51	20	QM-07
Cadmium	96.2	2.0	"	95.2	ND	101	75-125	5.35	20	
Chromium	122	2.0	"	95.2	44.6	81.1	75-125	4.71	20	
Lead	94.2	3.0	"	95.2	15.0	83.2	75-125	1.19	20	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091241 - EPA 3050B										
Blank (8091241-BLK1)				Prepared: 09/12/18 Analyzed: 09/13/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8091241-BS1)				Prepared: 09/12/18 Analyzed: 09/13/18						
Arsenic	27.0	0.25	mg/kg	25.0		108	80-120			
Lead	29.9	0.25	"	25.0		119	80-120			
Matrix Spike (8091241-MS1)		**Source: T182803-04**		Prepared: 09/12/18 Analyzed: 09/13/18						
Arsenic	44.7	0.25	mg/kg	25.0	18.4	105	75-125			
Lead	52.9	0.25	"	25.0	26.6	105	75-125			
Matrix Spike (8091241-MS2)		**Source: T182803-05**		Prepared: 09/12/18 Analyzed: 09/13/18						
Arsenic	47.9	0.25	mg/kg	25.0	17.0	124	75-125			
Lead	39.6	0.25	"	25.0	7.84	127	75-125			QR-04
Matrix Spike Dup (8091241-MSD1)		**Source: T182803-04**		Prepared: 09/12/18 Analyzed: 09/13/18						
Arsenic	40.4	0.25	mg/kg	25.0	18.4	88.3	75-125	10.0	20	
Lead	52.0	0.25	"	25.0	26.6	101	75-125	1.83	20	
Batch 8091321 - EPA 3050B										
Blank (8091321-BLK1)				Prepared & Analyzed: 09/13/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8091321-BS1)				Prepared: 09/13/18 Analyzed: 09/14/18						
Arsenic	25.3	0.25	mg/kg	25.0		101	80-120			
Lead	25.3	0.25	"	25.0		101	80-120			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091321 - EPA 3050B										
Duplicate (8091321-DUP1)		**Source: T182803-34**		Prepared & Analyzed: 09/13/18						
Arsenic	16.2	1.2	mg/kg		17.5			7.31	200	
Lead	6.60	1.2	"		8.07			20.0	200	
Matrix Spike (8091321-MS1)		**Source: T182803-34**		Prepared & Analyzed: 09/13/18						
Arsenic	46.6	0.25	mg/kg	25.0	17.5	117	75-125			
Lead	39.7	0.25	"	25.0	8.07	127	75-125			QM-07
Matrix Spike (8091321-MS2)		**Source: T182803-35**		Prepared & Analyzed: 09/13/18						
Arsenic	53.7	0.25	mg/kg	24.3	21.7	132	75-125			QM-07
Lead	39.9	0.25	"	24.3	8.08	131	75-125			QM-07
Matrix Spike Dup (8091321-MSD1)		**Source: T182803-34**		Prepared & Analyzed: 09/13/18						
Arsenic	53.1	0.25	mg/kg	24.8	17.5	144	75-125	12.9	20	QM-07
Lead	43.3	0.25	"	24.8	8.07	143	75-125	8.69	20	QM-07
Post Spike (8091321-PS1)		**Source: T182803-34**		Prepared & Analyzed: 09/13/18						
Arsenic	33.7		mg/kg	25.0	17.5	65.0	80-120			QM-07
Lead	23.6		"	25.0	8.07	62.2	80-120			QM-07
Batch 8091324 - EPA 3010A										
Blank (8091324-BLK1)				Prepared & Analyzed: 09/13/18						
Arsenic	ND	1.0	ug/l							
Lead	ND	2.0	"							
LCS (8091324-BS1)				Prepared & Analyzed: 09/13/18						
Arsenic	49.3	1.0	ug/l	50.0		98.6	80-120			
Lead	51.4	2.0	"	50.0		103	80-120			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091324 - EPA 3010A										
Matrix Spike (8091324-MS1)		**Source: T182803-51**		Prepared & Analyzed: 09/13/18						
Arsenic	50.3	1.0	ug/l	50.0	ND	101	75-125			
Lead	50.3	2.0	"	50.0	ND	101	75-125			
Matrix Spike Dup (8091324-MSD1)		**Source: T182803-51**		Prepared & Analyzed: 09/13/18						
Arsenic	52.8	1.0	ug/l	50.0	ND	106	75-125	4.94	20	
Lead	51.0	2.0	"	50.0	ND	102	75-125	1.35	20	

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Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091326 - EPA 7470A Water										
Blank (8091326-BLK1)				Prepared: 09/13/18 Analyzed: 09/17/18						
Mercury	ND	0.50	ug/l							
LCS (8091326-BS1)				Prepared: 09/13/18 Analyzed: 09/17/18						
Mercury	4.54	0.50	ug/l	5.00		90.7	80-120			
Matrix Spike (8091326-MS1)		**Source: T182803-51**		Prepared: 09/13/18 Analyzed: 09/17/18						
Mercury	4.29	0.50	ug/l	5.00	ND	85.9	75-125			
Matrix Spike Dup (8091326-MSD1)		**Source: T182803-51**		Prepared: 09/13/18 Analyzed: 09/17/18						
Mercury	4.27	0.50	ug/l	5.00	ND	85.4	75-125	0.531	20	
Batch 8091405 - EPA 7471A Soil										
Blank (8091405-BLK1)				Prepared & Analyzed: 09/14/18						
Mercury	ND	0.10	mg/kg							
LCS (8091405-BS1)				Prepared & Analyzed: 09/14/18						
Mercury	0.386	0.10	mg/kg	0.417		92.5	80-120			
Matrix Spike (8091405-MS1)		**Source: T182803-01**		Prepared & Analyzed: 09/14/18						
Mercury	0.373	0.10	mg/kg	0.417	ND	89.4	75-125			
Matrix Spike Dup (8091405-MSD1)		**Source: T182803-01**		Prepared & Analyzed: 09/14/18						
Mercury	0.384	0.10	mg/kg	0.417	ND	92.1	75-125	2.98	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091141 - EPA 3510C GCMS/ECD										
Blank (8091141-BLK1)				Prepared: 09/11/18 Analyzed: 09/12/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*68.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.817*		*"*	*1.00*		*81.7*	*35-140*			
LCS (8091141-BS1)				Prepared: 09/11/18 Analyzed: 09/12/18						
gamma-BHC (Lindane)	3.18	1.00	ug/l	4.00		79.4	40-120			
Heptachlor	3.08	1.00	"	4.00		77.0	40-120			
Aldrin	2.85	1.00	"	4.00		71.3	40-120			
Dieldrin	3.43	1.00	"	4.00		85.7	40-120			
Endrin	3.42	1.00	"	4.00		85.5	40-120			
4,4´-DDT	3.58	2.00	"	4.00		89.5	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.706*		*"*	*1.00*		*70.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.850*		*"*	*1.00*		*85.0*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091141 - EPA 3510C GCMS/ECD										
LCS Dup (8091141-BSD1)				Prepared: 09/11/18 Analyzed: 09/12/18						
gamma-BHC (Lindane)	2.78	1.00	ug/l	4.00		69.5	40-120	13.4	20	
Heptachlor	2.69	1.00	"	4.00		67.3	40-120	13.5	20	
Aldrin	2.61	1.00	"	4.00		65.1	40-120	8.99	20	
Dieldrin	3.04	1.00	"	4.00		75.9	40-120	12.2	20	
Endrin	2.98	1.00	"	4.00		74.4	40-120	13.9	20	
4,4´-DDT	3.05	2.00	"	4.00		76.4	40-120	15.9	20	
Surrogate: Tetrachloro-meta-xylene	*0.667*		*"*	*1.00*		*66.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.757*		*"*	*1.00*		*75.7*	*35-140*			
Batch 8091319 - EPA 3550 ECD/GCMS										
Blank (8091319-BLK1)				Prepared: 09/13/18 Analyzed: 09/16/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.99*		*"*	*10.0*		*79.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.01*		*"*	*10.0*		*70.1*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091319 - EPA 3550 ECD/GCMS										
LCS (8091319-BS1)				Prepared: 09/13/18 Analyzed: 09/16/18						
gamma-BHC (Lindane)	40.5	5.0	ug/kg	40.0		101	40-120			
Heptachlor	40.7	5.0	"	40.0		102	40-120			
Aldrin	36.2	5.0	"	40.0		90.4	40-120			
Dieldrin	40.7	5.0	"	40.0		102	40-120			
Endrin	38.6	5.0	"	40.0		96.5	40-120			
4,4´-DDT	37.3	5.0	"	40.0		93.2	33-147			
Surrogate: Tetrachloro-meta-xylene	*8.19*		*"*	*10.0*		*81.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.68*		*"*	*10.0*		*76.8*	*35-140*			
LCS Dup (8091319-BSD1)				Prepared: 09/13/18 Analyzed: 09/16/18						
gamma-BHC (Lindane)	42.2	5.0	ug/kg	40.0		105	40-120	4.07	30	
Heptachlor	40.3	5.0	"	40.0		101	40-120	0.815	30	
Aldrin	34.9	5.0	"	40.0		87.2	40-120	3.64	30	
Dieldrin	42.4	5.0	"	40.0		106	40-120	4.06	30	
Endrin	38.1	5.0	"	40.0		95.3	40-120	1.22	30	
4,4´-DDT	36.7	5.0	"	40.0		91.7	33-147	1.63	30	
Surrogate: Tetrachloro-meta-xylene	*7.82*		*"*	*10.0*		*78.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.50*		*"*	*10.0*		*75.0*	*35-140*			
Batch 8091336 - EPA 3550 ECD/GCMS										
Blank (8091336-BLK1)				Prepared: 09/13/18 Analyzed: 09/16/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091336 - EPA 3550 ECD/GCMS										
Blank (8091336-BLK1)				Prepared: 09/13/18 Analyzed: 09/16/18						
Endosulfan II	ND	5.0	ug/kg							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.31*		*"*	*10.1*		*72.4*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.47*		*"*	*10.1*		*73.9*	*35-140*			
LCS (8091336-BS1)				Prepared: 09/13/18 Analyzed: 09/16/18						
gamma-BHC (Lindane)	32.6	5.0	ug/kg	40.4		80.6	40-120			
Heptachlor	32.4	5.0	"	40.4		80.1	40-120			
Aldrin	31.2	5.0	"	40.4		77.2	40-120			
Dieldrin	33.0	5.0	"	40.4		81.6	40-120			
Endrin	30.8	5.0	"	40.4		76.2	40-120			
4,4´-DDT	27.6	5.0	"	40.4		68.4	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.49*		*"*	*10.1*		*74.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.79*		*"*	*10.1*		*77.1*	*35-140*			
LCS Dup (8091336-BSD1)				Prepared: 09/13/18 Analyzed: 09/16/18						
gamma-BHC (Lindane)	33.3	5.0	ug/kg	40.4		82.4	40-120	2.26	30	
Heptachlor	33.6	5.0	"	40.4		83.1	40-120	3.76	30	
Aldrin	32.0	5.0	"	40.4		79.3	40-120	2.73	30	
Dieldrin	34.4	5.0	"	40.4		85.2	40-120	4.29	30	
Endrin	32.7	5.0	"	40.4		80.9	40-120	6.01	30	
4,4´-DDT	30.6	5.0	"	40.4		75.7	33-147	10.2	30	
Surrogate: Tetrachloro-meta-xylene	*7.64*		*"*	*10.1*		*75.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.97*		*"*	*10.1*		*78.9*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091340 - EPA 3550 ECD/GCMS										
Blank (8091340-BLK1)				Prepared: 09/13/18 Analyzed: 09/17/18						
PCB-1016	ND	10	ug/kg							
PCB-1221	ND	10	"							
PCB-1232	ND	10	"							
PCB-1242	ND	10	"							
PCB-1248	ND	10	"							
PCB-1254	ND	10	"							
PCB-1260	ND	10	"							
Surrogate: Tetrachloro-meta-xylene	*8.18*		*"*	*10.1*		*81.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.85*		*"*	*10.1*		*87.6*	*35-140*			
LCS (8091340-BS1)				Prepared: 09/13/18 Analyzed: 09/17/18						
PCB-1016	83.1	10	ug/kg	99.0		84.0	40-130			
PCB-1260	84.0	10	"	99.0		84.8	40-130			
Surrogate: Tetrachloro-meta-xylene	*6.85*		*"*	*9.90*		*69.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.48*		*"*	*9.90*		*85.6*	*35-140*			
LCS Dup (8091340-BSD1)				Prepared: 09/13/18 Analyzed: 09/17/18						
PCB-1016	71.8	10	ug/kg	98.0		73.2	40-130	14.6	30	
PCB-1260	71.2	10	"	98.0		72.6	40-130	16.5	30	
Surrogate: Tetrachloro-meta-xylene	*5.75*		*"*	*9.80*		*58.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.19*		*"*	*9.80*		*73.3*	*35-140*			
Batch 8091401 - EPA 3510C GCMS/ECD										
Blank (8091401-BLK1)				Prepared: 09/14/18 Analyzed: 09/17/18						
PCB-1016	ND	2.00	ug/l							
PCB-1221	ND	2.00	"							
PCB-1232	ND	2.00	"							
PCB-1242	ND	2.00	"							
PCB-1248	ND	2.00	"							
PCB-1254	ND	2.00	"							
PCB-1260	ND	2.00	"							
Surrogate: Tetrachloro-meta-xylene	*0.560*		*"*	*1.00*		*56.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.755*		*"*	*1.00*		*75.5*	*35-140*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091401 - EPA 3510C GCMS/ECD										
LCS (8091401-BS1)				Prepared: 09/14/18 Analyzed: 09/17/18						
PCB-1016	7.10	2.00	ug/l	10.0		71.0	40-130			
PCB-1260	6.76	2.00	"	10.0		67.6	40-130			
Surrogate: Tetrachloro-meta-xylene	*0.552*		*"*	*1.00*		*55.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.723*		*"*	*1.00*		*72.3*	*35-140*			
Matrix Spike (8091401-MS1)		**Source: T182803-51**		Prepared: 09/14/18 Analyzed: 09/17/18						
PCB-1016	6.83	2.00	ug/l	10.0	ND	68.3	40-130			
PCB-1260	6.60	2.00	"	10.0	ND	66.0	40-130			
Surrogate: Tetrachloro-meta-xylene	*0.551*		*"*	*1.00*		*55.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.733*		*"*	*1.00*		*73.3*	*35-140*			
Matrix Spike Dup (8091401-MSD1)		**Source: T182803-51**		Prepared: 09/14/18 Analyzed: 09/17/18						
PCB-1016	5.33	2.00	ug/l	10.0	ND	53.3	40-130	24.8	30	
PCB-1260	5.20	2.00	"	10.0	ND	52.0	40-130	23.8	30	
Surrogate: Tetrachloro-meta-xylene	*0.352*		*"*	*1.00*		*35.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.594*		*"*	*1.00*		*59.4*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091127 - EPA 5030 GCMS										
Blank (8091127-BLK1)				Prepared & Analyzed: 09/11/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091127 - EPA 5030 GCMS										
Blank (8091127-BLK1)				Prepared & Analyzed: 09/11/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.3*		*"*	*20.0*		*96.4*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.7*		*"*	*20.0*		*104*	*71.5-128*			
Surrogate: Toluene-d8	*19.9*		*"*	*20.0*		*99.6*	*92.6-108*			
LCS (8091127-BS1)				Prepared & Analyzed: 09/11/18						
Chlorobenzene	19.3	1.0	ug/l	20.0		96.6	79.3-117			
1,1-Dichloroethene	15.6	1.0	"	20.0		77.9	68.3-130			
Trichloroethene	17.6	1.0	"	20.0		88.0	82.4-119			
Benzene	18.6	0.50	"	20.0		92.8	79.9-118			
Toluene	18.1	0.50	"	20.0		90.4	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.8*		*"*	*20.0*		*98.8*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.8*		*"*	*20.0*		*104*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*100*	*92.6-108*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091127 - EPA 5030 GCMS										
LCS Dup (8091127-BSD1)				Prepared & Analyzed: 09/11/18						
Chlorobenzene	20.2	1.0	ug/l	20.0		101	79.3-117	4.35	20	
1,1-Dichloroethene	15.2	1.0	"	20.0		76.0	68.3-130	2.40	20	
Trichloroethene	17.6	1.0	"	20.0		88.2	82.4-119	0.284	20	
Benzene	19.1	0.50	"	20.0		95.7	79.9-118	3.02	20	
Toluene	18.6	0.50	"	20.0		93.0	78.7-116	2.83	20	
Surrogate: 4-Bromofluorobenzene	*19.7*		*"*	*20.0*		*98.4*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.9*		*"*	*20.0*		*105*	*71.5-128*			
Surrogate: Toluene-d8	*19.9*		*"*	*20.0*		*99.6*	*92.6-108*			
Batch 8091129 - EPA 5035 GCMS										
Blank (8091129-BLK1)				Prepared & Analyzed: 09/11/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091129 - EPA 5035 GCMS										
Blank (8091129-BLK1)				Prepared & Analyzed: 09/11/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091129 - EPA 5035 GCMS										
Blank (8091129-BLK1)				Prepared & Analyzed: 09/11/18						
Surrogate: Toluene-d8	*39.0*		*ug/kg*	*39.9*		*97.7*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*38.2*		*"*	*39.9*		*95.7*	*85.9-114*			
Surrogate: Dibromofluoromethane	*36.9*		*"*	*39.9*		*92.4*	*77.8-142*			
LCS (8091129-BS1)				Prepared: 09/11/18 Analyzed: 09/12/18						
Chlorobenzene	78.4	5.0	ug/kg	99.2		79.0	75-125			
1,1-Dichloroethene	83.7	5.0	"	99.2		84.4	75-125			
Trichloroethene	82.4	5.0	"	99.2		83.1	75-125			
Benzene	87.5	5.0	"	99.2		88.2	75-125			
Toluene	86.0	5.0	"	99.2		86.6	75-125			
Surrogate: Toluene-d8	*39.9*		*"*	*39.7*		*100*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.4*		*"*	*39.7*		*102*	*85.9-114*			
Surrogate: Dibromofluoromethane	*37.0*		*"*	*39.7*		*93.2*	*77.8-142*			
LCS Dup (8091129-BSD1)				Prepared: 09/11/18 Analyzed: 09/12/18						
Chlorobenzene	75.0	5.0	ug/kg	99.8		75.2	75-125	4.41	20	
1,1-Dichloroethene	99.8	5.0	"	99.8		100	75-125	17.6	20	
Trichloroethene	80.7	5.0	"	99.8		80.9	75-125	2.11	20	
Benzene	85.4	5.0	"	99.8		85.5	75-125	2.44	20	
Toluene	81.9	5.0	"	99.8		82.1	75-125	4.78	20	
Surrogate: Toluene-d8	*37.7*		*"*	*39.9*		*94.4*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.0*		*"*	*39.9*		*100*	*85.9-114*			
Surrogate: Dibromofluoromethane	*39.1*		*"*	*39.9*		*98.0*	*77.8-142*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091121 - EPA 3550 ECD/GCMS										
Blank (8091121-BLK1)				Prepared & Analyzed: 09/11/18						
Carbazole	ND	10	ug/l							
Aniline	ND	10	"							
Phenol	ND	10	"							
Acenaphthylene	ND	10	"							
2-Chlorophenol	ND	10	"							
1,4-Dichlorobenzene	ND	10	"							
Anthracene	ND	10	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	10	"							
1-Methylnaphthalene	ND	10	"							
2-Methylnaphthalene	ND	20	"							
Acenaphthene	ND	10	"							
Benzo (a) anthracene	ND	10	"							
Benzo (b) fluoranthene	ND	10	"							
4-Nitrophenol	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
2,4-Dinitrotoluene	ND	10	"							
Benzo (g,h,i) perylene	ND	20	"							
Pentachlorophenol	ND	10	"							
Benzo (a) pyrene	ND	10	"							
Pyrene	ND	10	"							
Benzyl alcohol	ND	50	"							
Bis(2-chloroethoxy)methane	ND	10	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	20	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	10	"							
4-Chloroaniline	ND	20	"							
2-Chloronaphthalene	ND	10	"							
4-Chlorophenyl phenyl ether	ND	20	"							
Chrysene	ND	10	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	20	"							
Di-n-butyl phthalate	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091121 - EPA 3550 ECD/GCMS										
Blank (8091121-BLK1)				Prepared & Analyzed: 09/11/18						
1,2-Dichlorobenzene	ND	5.0	ug/l							
1,3-Dichlorobenzene	ND	5.0	"							
2,4-Dichlorophenol	ND	10	"							
Diethyl phthalate	ND	10	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	10	"							
4,6-Dinitro-2-methylphenol	ND	5.0	"							
2,4-Dinitrophenol	ND	10	"							
2,6-Dinitrotoluene	ND	20	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Hexachlorobenzene	ND	20	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	20	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	10	"							
2-Methylphenol	ND	10	"							
4-Methylphenol	ND	20	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	20	"							
2-Nitrophenol	ND	10	"							
N-Nitrosodiphenylamine	ND	10	"							
N-Nitrosodimethylamine	ND	25	"							
Phenanthrene	ND	10	"							
2,4,5-Trichlorophenol	ND	20	"							
2,4,6-Trichlorophenol	ND	10	"							
2,3,4,6-Tetrachlorophenol	ND	10	"							
2,3,5,6-Tetrachlorophenol	ND	10	"							
1,4-Dinitrobenzene	ND	10	"							
Pyridine	ND	10	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091121 - EPA 3550 ECD/GCMS										
Blank (8091121-BLK1)				Prepared & Analyzed: 09/11/18						
Surrogate: 2-Fluorophenol	*101*		*ug/l*	*200*		*50.5*	*15-121*			
Surrogate: Phenol-d6	*91.9*		*"*	*200*		*46.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*138*		*"*	*200*		*69.2*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*143*		*"*	*200*		*71.4*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*166*		*"*	*200*		*83.0*	*12.9-110*			
Surrogate: Terphenyl-dl4	*173*		*"*	*200*		*86.5*	*15.8-136*			
LCS (8091121-BS1)				Prepared & Analyzed: 09/11/18						
Phenol	89.4	10	ug/l	200		44.7	12-89			
2-Chlorophenol	129	10	"	200		64.5	40-120			
1,4-Dichlorobenzene	79.1	10	"	200		39.5	33-94			
N-Nitrosodi-n-propylamine	132	5.0	"	200		66.2	40-120			
1,2,4-Trichlorobenzene	98.5	5.0	"	200		49.2	40-120			
4-Chloro-3-methylphenol	151	10	"	200		75.4	50-130			
Acenaphthene	145	10	"	200		72.6	50-130			
4-Nitrophenol	109	10	"	200		54.7	10-80			
2,4-Dinitrotoluene	146	10	"	200		72.8	24-96			
Pentachlorophenol	207	10	"	200		103	50-130			
Pyrene	166	10	"	200		82.9	26-127			
Surrogate: 2-Fluorophenol	*102*		*"*	*200*		*51.1*	*15-121*			
Surrogate: Phenol-d6	*92.3*		*"*	*200*		*46.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*142*		*"*	*200*		*71.2*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*145*		*"*	*200*		*72.3*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*179*		*"*	*200*		*89.3*	*12.9-110*			
Surrogate: Terphenyl-dl4	*177*		*"*	*200*		*88.6*	*15.8-136*			
LCS Dup (8091121-BSD1)				Prepared & Analyzed: 09/11/18						
Phenol	99.3	10	ug/l	200		49.7	12-89	10.5	42	
2-Chlorophenol	148	10	"	200		73.8	40-120	13.5	40	
1,4-Dichlorobenzene	96.0	10	"	200		48.0	33-94	19.3	28	
N-Nitrosodi-n-propylamine	151	5.0	"	200		75.6	40-120	13.3	38	
1,2,4-Trichlorobenzene	112	5.0	"	200		56.0	40-120	12.9	28	
4-Chloro-3-methylphenol	161	10	"	200		80.4	50-130	6.42	42	
Acenaphthene	154	10	"	200		76.8	50-130	5.67	31	
4-Nitrophenol	115	10	"	200		57.4	10-80	4.80	50	
2,4-Dinitrotoluene	158	10	"	200		79.2	24-96	8.51	38	

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Lake Forest, California 92630
949.297.5020 Phone
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091121 - EPA 3550 ECD/GCMS										
LCS Dup (8091121-BSD1)				Prepared & Analyzed: 09/11/18						
Pentachlorophenol	232	10	ug/l	200		116	50-130	11.5	50	
Pyrene	174	10	"	200		87.2	26-127	4.97	31	
Surrogate: 2-Fluorophenol	*120*		*"*	*200*		*60.2*	*15-121*			
Surrogate: Phenol-d6	*103*		*"*	*200*		*51.4*	*24-113*			
Surrogate: Nitrobenzene-d5	*155*		*"*	*200*		*77.5*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*153*		*"*	*200*		*76.7*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*193*		*"*	*200*		*96.4*	*12.9-110*			
Surrogate: Terphenyl-dl4	*181*		*"*	*200*		*90.6*	*15.8-136*			
Batch 8091348 - EPA 3550 ECD/GCMS										
Blank (8091348-BLK1)				Prepared: 09/13/18 Analyzed: 09/18/18						
Carbazole	ND	300	ug/kg							
Aniline	ND	300	"							
Phenol	ND	1000	"							
2-Chlorophenol	ND	1000	"							
1,4-Dichlorobenzene	ND	300	"							
N-Nitrosodi-n-propylamine	ND	300	"							
1,2,4-Trichlorobenzene	ND	300	"							
4-Chloro-3-methylphenol	ND	1000	"							
2-Methylnaphthalene	ND	300	"							
1-Methylnaphthalene	ND	300	"							
Acenaphthene	ND	300	"							
4-Nitrophenol	ND	1000	"							
2,4-Dinitrotoluene	ND	300	"							
Pentachlorophenol	ND	1000	"							
Pyrene	ND	300	"							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Benzyl alcohol	ND	300	"							
Bis(2-chloroethoxy)methane	ND	300	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091348 - EPA 3550 ECD/GCMS										
Blank (8091348-BLK1)				Prepared: 09/13/18 Analyzed: 09/18/18						
Bis(2-chloroethyl)ether	ND	300	ug/kg							
Bis(2-chloroisopropyl)ether	ND	300	"							
Bis(2-ethylhexyl)phthalate	ND	300	"							
4-Bromophenyl phenyl ether	ND	300	"							
Butyl benzyl phthalate	ND	300	"							
4-Chloroaniline	ND	300	"							
2-Chloronaphthalene	ND	300	"							
4-Chlorophenyl phenyl ether	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Dibenzofuran	ND	300	"							
Di-n-butyl phthalate	ND	300	"							
1,2-Dichlorobenzene	ND	300	"							
1,3-Dichlorobenzene	ND	300	"							
2,4-Dichlorophenol	ND	1000	"							
Diethyl phthalate	ND	300	"							
2,4-Dimethylphenol	ND	1000	"							
Dimethyl phthalate	ND	300	"							
4,6-Dinitro-2-methylphenol	ND	1000	"							
2,4-Dinitrophenol	ND	1000	"							
2,6-Dinitrotoluene	ND	1000	"							
Di-n-octyl phthalate	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Hexachlorobenzene	ND	1500	"							
Hexachlorobutadiene	ND	300	"							
Hexachlorocyclopentadiene	ND	1000	"							
Hexachloroethane	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Isophorone	ND	300	"							
2-Methylphenol	ND	1000	"							
4-Methylphenol	ND	1000	"							
Naphthalene	ND	300	"							
2-Nitroaniline	ND	300	"							
3-Nitroaniline	ND	300	"							
4-Nitroaniline	ND	300	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091348 - EPA 3550 ECD/GCMS										
Blank (8091348-BLK1)				Prepared: 09/13/18 Analyzed: 09/18/18						
Nitrobenzene	ND	1000	ug/kg							
2-Nitrophenol	ND	1000	"							
N-Nitrosodimethylamine	ND	300	"							
N-Nitrosodiphenylamine	ND	300	"							
2,3,5,6-Tetrachlorophenol	ND	300	"							
2,3,4,6-Tetrachlorophenol	ND	300	"							
Phenanthrene	ND	300	"							
Azobenzene	ND	300	"							
Pyridine	ND	300	"							
2,4,5-Trichlorophenol	ND	1000	"							
2,4,6-Trichlorophenol	ND	1000	"							
Surrogate: 2-Fluorophenol	*2020*		*"*	*3280*		*61.7*	*15-121*			
Surrogate: Phenol-d6	*2120*		*"*	*3280*		*64.7*	*24-113*			
Surrogate: Nitrobenzene-d5	*2040*		*"*	*3280*		*62.2*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2520*		*"*	*3280*		*76.9*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2770*		*"*	*3280*		*84.4*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3250*		*"*	*3280*		*99.1*	*29.1-130*			
LCS (8091348-BS1)				Prepared: 09/13/18 Analyzed: 09/18/18						
Phenol	2180	1000	ug/kg	3380		64.5	34-114			
2-Chlorophenol	2250	1000	"	3380		66.6	34-114			
1,4-Dichlorobenzene	2260	300	"	3380		66.8	34-114			
N-Nitrosodi-n-propylamine	2230	300	"	3380		66.1	30-110			
1,2,4-Trichlorobenzene	2420	300	"	3380		71.8	39-119			
4-Chloro-3-methylphenol	2520	1000	"	3380		74.7	50-130			
Acenaphthene	2590	300	"	3380		76.7	34-114			
Pentachlorophenol	3430	1000	"	3380		102	50-130			
Pyrene	3010	300	"	3380		89.1	30-110			
Surrogate: 2-Fluorophenol	*2250*		*"*	*3380*		*66.5*	*15-121*			
Surrogate: Phenol-d6	*2360*		*"*	*3380*		*69.8*	*24-113*			
Surrogate: Nitrobenzene-d5	*2370*		*"*	*3380*		*70.0*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2700*		*"*	*3380*		*79.9*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2830*		*"*	*3380*		*83.9*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3450*		*"*	*3380*		*102*	*29.1-130*			

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949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091348 - EPA 3550 ECD/GCMS										
LCS Dup (8091348-BSD1)				Prepared: 09/13/18 Analyzed: 09/18/18						
Phenol	2360	1000	ug/kg	3270		72.3	34-114	8.08	42	
2-Chlorophenol	2410	1000	"	3270		73.8	34-114	7.06	40	
1,4-Dichlorobenzene	2410	300	"	3270		73.8	34-114	6.63	28	
N-Nitrosodi-n-propylamine	2600	300	"	3270		79.5	30-110	15.1	38	
1,2,4-Trichlorobenzene	2520	300	"	3270		77.3	39-119	4.06	28	
4-Chloro-3-methylphenol	2570	1000	"	3270		78.6	50-130	1.70	42	
Acenaphthene	2720	300	"	3270		83.2	34-114	4.87	31	
Pentachlorophenol	3890	1000	"	3270		119	50-130	12.6	50	
Pyrene	3110	300	"	3270		95.2	30-110	3.34	31	
Surrogate: 2-Fluorophenol	*2350*		*"*	*3270*		*71.9*	*15-121*			
Surrogate: Phenol-d6	*2490*		*"*	*3270*		*76.3*	*24-113*			
Surrogate: Nitrobenzene-d5	*2440*		*"*	*3270*		*74.6*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2800*		*"*	*3270*		*85.7*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*3200*		*"*	*3270*		*97.9*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3590*		*"*	*3270*		*110*	*29.1-130*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/18/18 17:07

Notes and Definitions

S-GC	Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
S-03	The surrogate recovery was below acceptance criteria in the sample because of a possible matrix effect. The surrogate recovery was within acceptance criteria in the method blank and LCS.
QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-07	The spike recovery and or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRAPHASE
Address: 18401 VON KARMAN AVE
Phone: 949 3772227 Fax:
Project Manager: CLARE STEEDMAN

Date: 9/10/18 Page: 1 Of 1
Project Name: HAMILTON HIGH SCHOOL
Collector: DAN PHELPS/WS SKILLINGS Client Project #:
Batch #: T182803 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	~~8260 OXY~~	8260 BTEX, OXY only	8270C SVOCS	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb & As (6020)	PCBCs (8082)	Laboratory ID #	Comments/Preservative	Total # of containers
B57-5.0	9/10/18	0750	SOIL	5 VOA 1 JAR	X	X		X				X	X				X	01		
B57-10.0		0755			X	X		X				X	X				X	02		
B57-15.0		0800			X	X		X				X	X				X	03		
B53-0.5		0846		1 JAR											X	X		04		
B53-1.5		0847													X	X		05		
B53-2.5		0848													X	X		06		
B53-5.0		0840		5 VOA 1 JAR	X	X						X	X					07		
B53-10.0		0845			X	X						X	X					08		
B53-15.0		0850			X	X						X	X					09		
B65-0.5		0910		1 JAR											X	X		10		
B65-1.5		0911													X	X		11		
B65-5.0		0915		1 JAR 2 SVOA	X							X	X		X	X		12		
B65-10.0		0920			X							X	X					13		
B65-15.0		0925			X							X	X					14		
B61-0.5		0955		1 JAR											X	X		15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9-10-18 1843	[signature]	9-10-18 18:43
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.3°

Turn around time: STD

Notes
* - FOR TPH ANALYZE FOR TPH-GRO AND TPH-DRO/ORO
** PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171404

SunStar Laboratories

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949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 2 Of 4

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: T182803 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb & As (6020)		Laboratory ID #	Comments/Preservative	Total # of containers
B61-1.5	9/10/18	0956	soil	1 JAR											X	X		16		
B61-2.5		0957													X	X		17		
B61-5.0		1005		5 VOA 1 JAR	X							X	X					18		
B61-10.0		1010			X							X	X					19		
B61-15.0		1015			X							X	X					20		
B02-5.0		1210		5 VOA 1 JAR	X							X	X					21		
B02-10.0		1215			X							X	X					22		
B02-15.0		1220			X							X	X					23		
B06-0.5		1250		1 JAR											X	X		24		
B06-1.5		1251													X	X		25		
B06-2.5		1255													X	X		26		
B03-0.5		1300													X	X		27		
B03-1.5		1302													X	X		28		
B03-2.5		1305													X	X		29		
B07-0.5		1320													X	X		30		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
[signature]	9-10-18 1843	[signature]	9/10/18 18:43

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.3°

Turn around time: STD

Notes: * - FOR TPH ANALYZE FOR TPH-GRO AND TPH-DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171419

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 3 Of 4

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: T182803 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb FAs (6020)		Laboratory ID #	Comments/Preservative	Total # of containers
B07-1.5	9/10/18	1321	SOIL	1 JAR											X	X		31		
B07-2.5	↓	1325	↓	↓											X	X		32		
B08-0.5		1335													X	X		33		
B08-1.5		1336													X	X		34		
B08-2.5		1338													X	X		35		
B09-0.5		1345													X	X		36		
B09-1.5		1346													X	X		37		
B09-2.5		1348													X	X		38		
B17-0.5		1409													X	X		39		
B17-1.5		1410													X	X		40		
B17-2.5		1412													X	X		41		
B10-0.5		1435													X	X		42		
B10-1.5		1437													X	X		43		
B10-2.5		1440													X	X		44		
B27-0.5	↓	1442	↓	↓											X	X		45		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9-10-18 1843	[signature]	9-10-18 18:43
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.3°

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171036

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 4 Of 4

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: T182803 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270 SVOCs	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb, As (6020)	PCBs (8082)	Laboratory ID #	Comments/Preservative	Total # of containers
B27-1.5	9/10/18	1423	SOIL	1 JAR											X	X		46		
B27-2.5		1425													X	X		47		
B16-0.5		1450													X	X		48		
B16-1.5		1453													X	X		49		
B16-2.5		1455													X	X		50		
EB-02		1530		6 VOAS																
				2 POLY																
→ EB-02				(3) 1L AMBER	X	X		X				X	X		X	X	X	51		
B65-2.5	9/10/18	0912													X	X		52		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
[signature]	9-10-18 1843	[signature]	9/10/18 18:48

Total # of containers: _____

Chain of Custody seals Y/N/NA: NA

Seals intact? Y/N/NA: NA

Received good condition/cold: 4.3°

Turn around time: STD

Notes: * - FOR TPH ANALYZE FOR TPH-GRO & TPH-DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171037

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182803

Client Name: TERRAPHASE

Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 9.10.18 1622

Lab Received by: SUNNY

Date/Time Lab Received: 9.10.18 1843

Total number of coolers received:

Temperature: Cooler #1 3.1	°C +/- the CF (1.2°C) = 4.3	°C corrected temperature	
Temperature: Cooler #2	°C +/- the CF (1.2°C) =	°C corrected temperature	
Temperature: Cooler #3	°C +/- the CF (1.2°C) =	°C corrected temperature	
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes** ☐ **No**	
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☐ Yes	☒ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BC 9.11.18

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # T182803

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☒ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: BG1-5.0, BG1-10.0, BG1-15.0 WERE MARKED AS BG0-(5.0, 10.0, 15.0)

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Dan Phelps [dan.phelps@terraphase.com]
Sent: Tuesday, September 11, 2018 11:29 AM
To: kris@sunstarlabs.com
Cc: Clare Steedman
Subject: Re: Sample ID B61
Attachments: image001.jpg

Yes+kŰ́s,++
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Kris Kubota+
Project Manager/Regional Account Manager +
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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/19/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/11/18 18:43
Logged In By:	Brian Charon	Date Logged In:	09/11/18 07:30

Samples Received at:	**4.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	No		
Preservation Confirm	Yes		

Analysis	Due	TAT	Expires	Comments
T182803-01 B57- 5.0 [Soil] Sampled 09/10/18 07:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 07:50	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 07:50	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 07:50	
8082 PCB	09/19/18 15:00	5	09/24/18 07:50	
8260 5035	09/19/18 15:00	5	09/24/18 07:50	
8270C	09/19/18 15:00	5	09/24/18 07:50	
T182803-02 B57- 10.0 [Soil] Sampled 09/10/18 07:55 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 07:55	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 07:55	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 07:55	
8082 PCB	09/19/18 15:00	5	09/24/18 07:55	
8260 5035	09/19/18 15:00	5	09/24/18 07:55	
8270C	09/19/18 15:00	5	09/24/18 07:55	
T182803-03 B57- 15.0 [Soil] Sampled 09/10/18 08:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:00	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:00	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:00	
8082 PCB	09/19/18 15:00	5	09/24/18 08:00	
8260 5035	09/19/18 15:00	5	09/24/18 08:00	
8270C	09/19/18 15:00	5	09/24/18 08:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-04 B53- 0.5 [Soil] Sampled 09/10/18 08:46 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 08:46	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 08:46	
T182803-05 B53- 1.5 [Soil] Sampled 09/10/18 08:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 08:47	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 08:47	
T182803-06 B53- 2.5 [Soil] Sampled 09/10/18 08:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 08:48	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 08:48	
T182803-07 B53- 5.0 [Soil] Sampled 09/10/18 08:40 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:40	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:40	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:40	
8260 5035	09/19/18 15:00	5	09/24/18 08:40	
T182803-08 B53- 10.0 [Soil] Sampled 09/10/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:45	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:45	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:45	
8260 5035	09/19/18 15:00	5	09/24/18 08:45	
T182803-09 B53- 15.0 [Soil] Sampled 09/10/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:50	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:50	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:50	
8260 5035	09/19/18 15:00	5	09/24/18 08:50	
T182803-10 B65- 0.5 [Soil] Sampled 09/10/18 09:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:10	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:10	
T182803-11 B65- 1.5 [Soil] Sampled 09/10/18 09:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:11	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-12 B65- 5.0 [Soil] Sampled 09/10/18 09:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 09:15	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 09:15	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 09:15	
8260 5035	09/19/18 15:00	5	09/24/18 09:15	
T182803-13 B65- 10.0 [Soil] Sampled 09/10/18 09:20 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 09:20	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 09:20	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 09:20	
8260 5035	09/19/18 15:00	5	09/24/18 09:20	
T182803-14 B65- 15.0 [Soil] Sampled 09/10/18 09:25 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 09:25	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 09:25	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 09:25	
8260 5035	09/19/18 15:00	5	09/24/18 09:25	
T182803-15 B61- 0.5 [Soil] Sampled 09/10/18 09:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:55	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:55	
T182803-16 B61- 1.5 [Soil] Sampled 09/10/18 09:56 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:56	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:56	
T182803-17 B61- 2.5 [Soil] Sampled 09/10/18 09:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:57	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:57	
T182803-18 B61- 5.0 [Soil] Sampled 09/10/18 10:05 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/19/18 15:00	5	03/09/19 10:05	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 10:05	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 10:05	
8260 5035	09/19/18 15:00	5	09/24/18 10:05	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-19 B61- 10.0 [Soil] Sampled 09/10/18 10:10 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/19/18 15:00	5	03/09/19 10:10	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 10:10	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 10:10	
8260 5035	09/19/18 15:00	5	09/24/18 10:10	
T182803-20 B61- 15.0 [Soil] Sampled 09/10/18 10:15 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/19/18 15:00	5	03/09/19 10:15	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 10:15	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 10:15	
8260 5035	09/19/18 15:00	5	09/24/18 10:15	
T182803-21 B02- 5.0 [Soil] Sampled 09/10/18 12:10 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 12:10	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 12:10	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 12:10	
8260 5035	09/19/18 15:00	5	09/24/18 12:10	
T182803-22 B02- 10.0 [Soil] Sampled 09/10/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 12:15	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 12:15	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 12:15	
8260 5035	09/19/18 15:00	5	09/24/18 12:15	
T182803-23 B02- 15.0 [Soil] Sampled 09/10/18 12:20 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 12:20	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 12:20	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 12:20	
8260 5035	09/19/18 15:00	5	09/24/18 12:20	
T182803-24 B06- 0.5 [Soil] Sampled 09/10/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 12:50	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 12:50	
T182803-25 B06- 1.5 [Soil] Sampled 09/10/18 12:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 12:51	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 12:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-26 B06- 2.5 [Soil] Sampled 09/10/18 12:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 12:55	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 12:55	
T182803-27 B03- 0.5 [Soil] Sampled 09/10/18 13:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:00	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:00	
T182803-28 B03- 1.5 [Soil] Sampled 09/10/18 13:02 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:02	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:02	
T182803-29 B03- 2.5 [Soil] Sampled 09/10/18 13:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:05	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:05	
T182803-30 B07- 0.5 [Soil] Sampled 09/10/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:20	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:20	
T182803-31 B07- 1.5 [Soil] Sampled 09/10/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:21	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:21	
T182803-32 B07- 2.5 [Soil] Sampled 09/10/18 13:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:25	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:25	
T182803-33 B08- 0.5 [Soil] Sampled 09/10/18 13:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:36	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:36	
T182803-34 B08- 1.5 [Soil] Sampled 09/10/18 13:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:36	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:36	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-35 B08- 2.5 [Soil] Sampled 09/10/18 13:38 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:38	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:38	
T182803-36 B09- 0.5 [Soil] Sampled 09/10/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:45	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:45	
T182803-37 B09- 1.5 [Soil] Sampled 09/10/18 13:46 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:46	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:46	
T182803-38 B09- 2.5 [Soil] Sampled 09/10/18 13:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:48	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:48	
T182803-39 B17- 0.5 [Soil] Sampled 09/10/18 14:09 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:09	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:09	
T182803-40 B17- 1.5 [Soil] Sampled 09/10/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:10	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:10	
T182803-41 B17- 2.5 [Soil] Sampled 09/10/18 14:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:12	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:12	
T182803-42 B10- 0.5 [Soil] Sampled 09/10/18 14:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:35	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:35	
T182803-43 B10- 1.5 [Soil] Sampled 09/10/18 14:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:37	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:37	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-44 B10- 2.5 [Soil] Sampled 09/10/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:40	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:40	
T182803-45 B27- 0.5 [Soil] Sampled 09/10/18 14:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:42	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:42	
T182803-46 B27- 1.5 [Soil] Sampled 09/10/18 14:23 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:23	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:23	
T182803-47 B27- 2.5 [Soil] Sampled 09/10/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:25	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:25	
T182803-48 B16- 0.5 [Soil] Sampled 09/10/18 14:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:50	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:50	
T182803-49 B16- 1.5 [Soil] Sampled 09/10/18 14:53 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:53	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:53	
T182803-50 B16- 2.5 [Soil] Sampled 09/10/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:55	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:55	
T182803-51 EB-02 [Water] Sampled 09/10/18 15:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 15:30	
6020 Metals by ICP-MS	09/19/18 15:00	5	03/09/19 15:30	As and Pb only
8015 CC (D/MO)	09/19/18 15:00	5	09/17/18 15:30	
8015 m Gas Purge	09/17/18 15:00	3	09/24/18 15:30	
8081 Pesticides	09/19/18 15:00	5	09/17/18 15:30	
8082 PCB	09/19/18 15:00	5	09/17/18 15:30	
8260	09/19/18 15:00	5	09/24/18 15:30	+OXY
8270C	09/19/18 15:00	5	09/17/18 15:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182803-52 B65- 2.5 [Soil] Sampled 09/10/18 09:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:12	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:12	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

28 November 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 09/10/18 18:43. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi For Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B03- 1.5	T182803-28	Soil	09/10/18 13:02	09/10/18 18:43
B10- 0.5	T182803-42	Soil	09/10/18 14:35	09/10/18 18:43

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:00

DETECTIONS SUMMARY

Sample ID: B03- 1.5 **Laboratory ID:** T182803-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**3.6**	0.10	mg/l	STLC Waste Extraction T	

Sample ID: B10- 0.5 **Laboratory ID:** T182803-42

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**3.3**	0.10	mg/l	STLC Waste Extraction T	

SunStar Laboratories, Inc.

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Mike Jaroudi For Kris Kubota, Project Manager Assistant

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Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:00

B03- 1.5

T182803-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
STLC Metals by 6000/7000 Series Methods									
Lead	**3.6**	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	

SunStar Laboratories, Inc.

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Mike Jaroudi For Kris Kubota, Project Manager Assistant

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949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:00

B10- 0.5

T182803-42 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
STLC Metals by 6000/7000 Series Methods									
Lead	**3.3**	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:00

STLC Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8111923 - STLC Metals										
Blank (8111923-BLK1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	ND	0.10	mg/l							
Arsenic	ND	0.10	"							
LCS (8111923-BS1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	9.57	0.10	mg/l	10.0		95.7	75-125			
Arsenic	10.9	0.10	"	10.0		109	75-125			
Matrix Spike (8111923-MS1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.4	0.10	mg/l	10.0	3.56	88.2	75-125			
Arsenic	10.1	0.10	"	10.0	0.846	92.5	75-125			
Matrix Spike Dup (8111923-MSD1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.6	0.10	mg/l	10.0	3.56	90.3	75-125	1.64	30	
Arsenic	10.8	0.10	"	10.0	0.846	99.4	75-125	6.61	30	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:00

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRAPHASE
Address: 18401 VON KARMAN AVE
Phone: 949 3772227 Fax:
Project Manager: CLARE STEEDMAN

Date: 9/10/18 Page: 1 Of 1
Project Name: HAMILTON HIGH SCHOOL
Collector: DAN PHELPS/WS SKILLINGS Client Project #:
Batch #: T182803 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	~~8260 OXY~~	8260 BTEX, OXY only	8270C SVOCS	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb & As (6020)	PCBCs (8082)	Laboratory ID #	Comments/Preservative	Total # of containers
B57-5.0	9/10/18	0750	SOIL	5 VOA 1 JAR	X	X		X				X	X				X	01		
B57-10.0		0755			X	X		X				X	X				X	02		
B57-15.0		0800			X	X		X				X	X				X	03		
B53-0.5		0846		1 JAR											X	X		04		
B53-1.5		0847													X	X		05		
B53-2.5		0848													X	X		06		
B53-5.0		0840		5 VOA 1 JAR	X	X						X	X					07		
B53-10.0		0845			X	X						X	X					08		
B53-15.0		0850			X	X						X	X					09		
B65-0.5		0910		1 JAR											X	X		10		
B65-1.5		0911													X	X		11		
B65-5.0		0915		1 JAR 2 SVOA	X							X	X		X	X		12		
B65-10.0		0920			X							X	X					13		
B65-15.0		0925			X							X	X					14		
B61-0.5		0955		1 JAR											X	X		15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9-10-18 1843	[signature]	9-10-18 18:43
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.3°

Turn around time: STD

Notes
* - FOR TPH ANALYZE FOR TPH-GRO AND TPH-DRO/ORO
** PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171404

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 2 Of 4

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: T182803 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb & As (6020)		Laboratory ID #	Comments/Preservative	Total # of containers
B61-1.5	9/10/18	0956	soil	1 JAR											X	X		16		
B61-2.5		0957													X	X		17		
B61-5.0		1005		5 VOA 1 JAR	X							X	X					18		
B61-10.0		1010			X							X	X					19		
B61-15.0		1015			X							X	X					20		
B02-5.0		1210		5 VOA 1 JAR	X							X	X					21		
B02-10.0		1215			X							X	X					22		
B02-15.0		1220			X							X	X					23		
B06-0.5		1250		1 JAR											X	X		24		
B06-1.5		1251													X	X		25		
B06-2.5		1255													X	X		26		
B03-0.5		1300													X	X		27		
B03-1.5		1302													X	X		28		
B03-2.5		1305													X	X		29		
B07-0.5		1320													X	X		30		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
[signature]	9-10-18 1843	[signature]	9/10/18 18:43

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.3°

Turn around time: STD

Notes: * - FOR TPH ANALYZE FOR TPH-GRO AND TPH-DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171419

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 3 Of 4

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: T182803 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb FAs (6020)		Laboratory ID #	Comments/Preservative	Total # of containers
B07-1.5	9/10/18	1321	SOIL	1 JAR											X	X		31		
B07-2.5	↓	1325	↓	↓											X	X		32		
B08-0.5		1335													X	X		33		
B08-1.5		1336													X	X		34		
B08-2.5		1338													X	X		35		
B09-0.5		1345													X	X		36		
B09-1.5		1346													X	X		37		
B09-2.5		1348													X	X		38		
B17-0.5		1409													X	X		39		
B17-1.5		1410													X	X		40		
B17-2.5		1412													X	X		41		
B10-0.5		1435													X	X		42		
B10-1.5		1437													X	X		43		
B10-2.5		1440													X	X		44		
B27-0.5	↓	1442	↓	↓											X	X		45		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9-10-18 1843	[signature]	9-10-18 18:43
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.3°

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171036

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 4 Of 4

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: T182803 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270 SVOCs	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ICP-MS Metals	OCPs (8081)	Pb, As (6020)	PCBs (8082)	Laboratory ID #	Comments/Preservative	Total # of containers
B27-1.5	9/10/18	1423	SOIL	1 JAR											X	X		46		
B27-2.5		1425													X	X		47		
B16-0.5		1450													X	X		48		
B16-1.5		1453													X	X		49		
B16-2.5		1455													X	X		50		
EB-02		1530		6 VOAS																
				2 POLY																
→ EB-02				(3) 1L AMBER	X	X		X				X	X		X	X	X	51		
B65-2.5	9/10/18	0912													X	X		52		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/10/18 1622	[signature]	9-10-18 1622
[signature]	9-10-18 1843	[signature]	9/10/18 18:48

Total # of containers: _____

Chain of Custody seals Y/N/NA: NA

Seals intact? Y/N/NA: NA

Received good condition/cold: 4.3°

Turn around time: STD

Notes: * - FOR TPH ANALYZE FOR TPH-GRO & TPH-DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171037

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182803

Client Name: TERRAPHASE

Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 9.10.18 1622

Lab Received by: SUNNY

Date/Time Lab Received: 9.10.18 1843

Total number of coolers received:

Temperature: Cooler #1 3.1	°C +/- the CF (1.2°C) = 4.3	°C corrected temperature	
Temperature: Cooler #2	°C +/- the CF (1.2°C) =	°C corrected temperature	
Temperature: Cooler #3	°C +/- the CF (1.2°C) =	°C corrected temperature	
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes** ☐ **No**	
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☐ Yes	☒ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BC 9.11.18

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # T182803

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☒ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: BG1-5.0, BG1-10.0, BG1-15.0 WERE MARKED AS BG0-(5.0, 10.0, 15.0)

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Dan Phelps [dan.phelps@terraphase.com]
Sent: Tuesday, September 11, 2018 11:29 AM
To: kris@sunstarlabs.com
Cc: Clare Steedman
Subject: Re: Sample ID B61
Attachments: image001.jpg

Yes+kŰ́s,++
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From: Rose Fasheh [Rose@sunstarlabs.com]
Sent: Monday, November 19, 2018 11:37 AM
To: 'Clare Steedman'
Cc: 'Mike'
Subject: Additional Request: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898
Attachments: T182803_WKO_02.pdf; T182898_WKO_02.pdf; T183211_WKO_02.pdf; T183212_WKO_03.pdf

Clare,

Please find attached revised work orders reflecting the additional STLC testing. Details are documented in the comments section (right hand side). We will have the additional STLC results for you before end of day Wednesday 11/28 as a standard 5-day TAT.

Let us know if you need anything else!

Happy Thanksgiving ☺

Rose Fasheh
Project Manager

SunStar Laboratories

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
Please note that SunStar Laboratories will be observing the Thanksgiving Holidays on Thursday and Friday, November 22nd and 23rd. In addition, GSO will not have scheduled service on Thursday, November 22nd. If you have any short hold samples arriving near or during these days, please contact your Project Manager in advance to ensure all holding times are met for your samples. SunStar will be available on Saturday, November 24th if needed to receive samples. Please let your Project Manager know if you will ship or deliver samples on this day.

We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:19 AM
To: Rose Fasheh
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Rose,

Thanks for the heads up. Standard turn is fine.

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Rose Fasheh <Rose@sunstarlabs.com>
Sent: Monday, November 19, 2018 11:18 AM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Good morning Clare,

Kris no longer works with SunStar, but I will go ahead and get those going for you. Is a standard 5-day TAT okay, or did you need the results expedited?

Thank you,

Rose Fasheh
Project Manager

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:12 AM
To: kris@sunstarlabs.com
Subject: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Kris,

Would you please analyze the following samples for **STLC** analysis?

B03-1.5 (T182803-28) for lead
B10-0.5 (T182803-42) for lead

B91-1.5 (T183211-05) for lead

B12-0.5 (T183212-17) for lead
B25-05 (T183212-14) for lead

B18-2.5 (T182898-28) for arsenic

Thank you,

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/19/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/11/18 18:43
Logged In By:	Brian Charon	Date Logged In:	09/11/18 07:30

Samples Received at:	**4.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	No		
Preservation Confirm	Yes		

Analysis	Due	TAT	Expires	Comments
T182803-01 B57- 5.0 [Soil] Sampled 09/10/18 07:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 07:50	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 07:50	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 07:50	
8082 PCB	09/19/18 15:00	5	09/24/18 07:50	
8260 5035	09/19/18 15:00	5	09/24/18 07:50	
8270C	09/19/18 15:00	5	09/24/18 07:50	
T182803-02 B57- 10.0 [Soil] Sampled 09/10/18 07:55 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 07:55	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 07:55	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 07:55	
8082 PCB	09/19/18 15:00	5	09/24/18 07:55	
8260 5035	09/19/18 15:00	5	09/24/18 07:55	
8270C	09/19/18 15:00	5	09/24/18 07:55	
T182803-03 B57- 15.0 [Soil] Sampled 09/10/18 08:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:00	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:00	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:00	
8082 PCB	09/19/18 15:00	5	09/24/18 08:00	
8260 5035	09/19/18 15:00	5	09/24/18 08:00	
8270C	09/19/18 15:00	5	09/24/18 08:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-04 B53- 0.5 [Soil] Sampled 09/10/18 08:46 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 08:46	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 08:46	
T182803-05 B53- 1.5 [Soil] Sampled 09/10/18 08:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 08:47	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 08:47	
T182803-06 B53- 2.5 [Soil] Sampled 09/10/18 08:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 08:48	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 08:48	
T182803-07 B53- 5.0 [Soil] Sampled 09/10/18 08:40 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:40	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:40	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:40	
8260 5035	09/19/18 15:00	5	09/24/18 08:40	
T182803-08 B53- 10.0 [Soil] Sampled 09/10/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:45	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:45	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:45	
8260 5035	09/19/18 15:00	5	09/24/18 08:45	
T182803-09 B53- 15.0 [Soil] Sampled 09/10/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 08:50	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 08:50	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 08:50	
8260 5035	09/19/18 15:00	5	09/24/18 08:50	
T182803-10 B65- 0.5 [Soil] Sampled 09/10/18 09:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:10	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:10	
T182803-11 B65- 1.5 [Soil] Sampled 09/10/18 09:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:11	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-12 B65- 5.0 [Soil] Sampled 09/10/18 09:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 09:15	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 09:15	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 09:15	
8260 5035	09/19/18 15:00	5	09/24/18 09:15	
T182803-13 B65- 10.0 [Soil] Sampled 09/10/18 09:20 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 09:20	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 09:20	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 09:20	
8260 5035	09/19/18 15:00	5	09/24/18 09:20	
T182803-14 B65- 15.0 [Soil] Sampled 09/10/18 09:25 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 09:25	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 09:25	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 09:25	
8260 5035	09/19/18 15:00	5	09/24/18 09:25	
T182803-15 B61- 0.5 [Soil] Sampled 09/10/18 09:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:55	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:55	
T182803-16 B61- 1.5 [Soil] Sampled 09/10/18 09:56 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:56	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:56	
T182803-17 B61- 2.5 [Soil] Sampled 09/10/18 09:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:57	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:57	
T182803-18 B61- 5.0 [Soil] Sampled 09/10/18 10:05 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/19/18 15:00	5	03/09/19 10:05	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 10:05	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 10:05	
8260 5035	09/19/18 15:00	5	09/24/18 10:05	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-19 B61- 10.0 [Soil] Sampled 09/10/18 10:10 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/19/18 15:00	5	03/09/19 10:10	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 10:10	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 10:10	
8260 5035	09/19/18 15:00	5	09/24/18 10:10	
T182803-20 B61- 15.0 [Soil] Sampled 09/10/18 10:15 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/19/18 15:00	5	03/09/19 10:15	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 10:15	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 10:15	
8260 5035	09/19/18 15:00	5	09/24/18 10:15	
T182803-21 B02- 5.0 [Soil] Sampled 09/10/18 12:10 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 12:10	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 12:10	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 12:10	
8260 5035	09/19/18 15:00	5	09/24/18 12:10	
T182803-22 B02- 10.0 [Soil] Sampled 09/10/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 12:15	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 12:15	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 12:15	
8260 5035	09/19/18 15:00	5	09/24/18 12:15	
T182803-23 B02- 15.0 [Soil] Sampled 09/10/18 12:20 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 12:20	
8015 CC (D/MO)	09/19/18 15:00	5	09/24/18 12:20	
8015 m 5035-GRO	09/19/18 15:00	5	09/24/18 12:20	
8260 5035	09/19/18 15:00	5	09/24/18 12:20	
T182803-24 B06- 0.5 [Soil] Sampled 09/10/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 12:50	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 12:50	
T182803-25 B06- 1.5 [Soil] Sampled 09/10/18 12:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 12:51	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 12:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-26 B06- 2.5 [Soil] Sampled 09/10/18 12:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 12:55	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 12:55	
T182803-27 B03- 0.5 [Soil] Sampled 09/10/18 13:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:00	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:00	
T182803-28 B03- 1.5 [Soil] Sampled 09/10/18 13:02 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:02	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:02	
T182803-29 B03- 2.5 [Soil] Sampled 09/10/18 13:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:05	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:05	
T182803-30 B07- 0.5 [Soil] Sampled 09/10/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:20	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:20	
T182803-31 B07- 1.5 [Soil] Sampled 09/10/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:21	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:21	
T182803-32 B07- 2.5 [Soil] Sampled 09/10/18 13:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:25	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:25	
T182803-33 B08- 0.5 [Soil] Sampled 09/10/18 13:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:36	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:36	
T182803-34 B08- 1.5 [Soil] Sampled 09/10/18 13:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:36	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:36	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-35 B08- 2.5 [Soil] Sampled 09/10/18 13:38 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:38	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:38	
T182803-36 B09- 0.5 [Soil] Sampled 09/10/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:45	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:45	
T182803-37 B09- 1.5 [Soil] Sampled 09/10/18 13:46 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:46	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:46	
T182803-38 B09- 2.5 [Soil] Sampled 09/10/18 13:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 13:48	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 13:48	
T182803-39 B17- 0.5 [Soil] Sampled 09/10/18 14:09 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:09	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:09	
T182803-40 B17- 1.5 [Soil] Sampled 09/10/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:10	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:10	
T182803-41 B17- 2.5 [Soil] Sampled 09/10/18 14:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:12	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:12	
T182803-42 B10- 0.5 [Soil] Sampled 09/10/18 14:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:35	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:35	
T182803-43 B10- 1.5 [Soil] Sampled 09/10/18 14:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:37	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:37	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-44 B10- 2.5 [Soil] Sampled 09/10/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:40	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:40	
T182803-45 B27- 0.5 [Soil] Sampled 09/10/18 14:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:42	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:42	
T182803-46 B27- 1.5 [Soil] Sampled 09/10/18 14:23 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:23	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:23	
T182803-47 B27- 2.5 [Soil] Sampled 09/10/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:25	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:25	
T182803-48 B16- 0.5 [Soil] Sampled 09/10/18 14:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:50	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:50	
T182803-49 B16- 1.5 [Soil] Sampled 09/10/18 14:53 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:53	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:53	
T182803-50 B16- 2.5 [Soil] Sampled 09/10/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 14:55	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 14:55	
T182803-51 EB-02 [Water] Sampled 09/10/18 15:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/19/18 15:00	5	03/09/19 15:30	
6020 Metals by ICP-MS	09/19/18 15:00	5	03/09/19 15:30	As and Pb only
8015 CC (D/MO)	09/19/18 15:00	5	09/17/18 15:30	
8015 m Gas Purge	09/17/18 15:00	3	09/24/18 15:30	
8081 Pesticides	09/19/18 15:00	5	09/17/18 15:30	
8082 PCB	09/19/18 15:00	5	09/17/18 15:30	
8260	09/19/18 15:00	5	09/24/18 15:30	+OXY
8270C	09/19/18 15:00	5	09/17/18 15:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182803-52 B65- 2.5 [Soil] Sampled 09/10/18 09:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/19/18 15:00	5	01/08/19 09:12	As and Pb only
8081 Pesticides	09/19/18 15:00	5	09/24/18 09:12	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/19/2018 11:25:11AM

WORK ORDER

T182803

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/18/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/10/18 18:43
Logged In By:	Brian Charon	Date Logged In:	09/11/18 07:30

Samples Received at:	**4.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	No		
Preservation Confir	Yes		

Analysis	Due	TAT	Expires	Comments
T182803-01 B57- 5.0 [Soil] Sampled 09/10/18 07:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 07:50	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 07:50	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 07:50	
8082 PCB	09/18/18 15:00	5	09/24/18 07:50	
8260 5035	09/18/18 15:00	5	09/24/18 07:50	
8270C	09/18/18 15:00	5	09/24/18 07:50	
T182803-02 B57- 10.0 [Soil] Sampled 09/10/18 07:55 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 07:55	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 07:55	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 07:55	
8082 PCB	09/18/18 15:00	5	09/24/18 07:55	
8260 5035	09/18/18 15:00	5	09/24/18 07:55	
8270C	09/18/18 15:00	5	09/24/18 07:55	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-03 B57- 15.0 [Soil] Sampled 09/10/18 08:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 08:00	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 08:00	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 08:00	
8082 PCB	09/18/18 15:00	5	09/24/18 08:00	
8260 5035	09/18/18 15:00	5	09/24/18 08:00	
8270C	09/18/18 15:00	5	09/24/18 08:00	
T182803-04 B53- 0.5 [Soil] Sampled 09/10/18 08:46 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 08:46	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 08:46	
T182803-05 B53- 1.5 [Soil] Sampled 09/10/18 08:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 08:47	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 08:47	
T182803-06 B53- 2.5 [Soil] Sampled 09/10/18 08:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 08:48	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 08:48	
T182803-07 B53- 5.0 [Soil] Sampled 09/10/18 08:40 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 08:40	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 08:40	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 08:40	
8260 5035	09/18/18 15:00	5	09/24/18 08:40	
T182803-08 B53- 10.0 [Soil] Sampled 09/10/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 08:45	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 08:45	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 08:45	
8260 5035	09/18/18 15:00	5	09/24/18 08:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-09 B53- 15.0 [Soil] Sampled 09/10/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 08:50	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 08:50	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 08:50	
8260 5035	09/18/18 15:00	5	09/24/18 08:50	
T182803-10 B65- 0.5 [Soil] Sampled 09/10/18 09:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 09:10	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 09:10	
T182803-11 B65- 1.5 [Soil] Sampled 09/10/18 09:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 09:11	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 09:11	
T182803-12 B65- 5.0 [Soil] Sampled 09/10/18 09:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 09:15	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 09:15	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 09:15	
8260 5035	09/18/18 15:00	5	09/24/18 09:15	
T182803-13 B65- 10.0 [Soil] Sampled 09/10/18 09:20 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 09:20	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 09:20	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 09:20	
8260 5035	09/18/18 15:00	5	09/24/18 09:20	
T182803-14 B65- 15.0 [Soil] Sampled 09/10/18 09:25 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 09:25	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 09:25	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 09:25	
8260 5035	09/18/18 15:00	5	09/24/18 09:25	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-15 B61- 0.5 [Soil] Sampled 09/10/18 09:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 09:55	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 09:55	
T182803-16 B61- 1.5 [Soil] Sampled 09/10/18 09:56 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 09:56	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 09:56	
T182803-17 B61- 2.5 [Soil] Sampled 09/10/18 09:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 09:57	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 09:57	
T182803-18 B61- 5.0 [Soil] Sampled 09/10/18 10:05 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/18/18 15:00	5	09/15/18 10:05	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 10:05	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 10:05	
8260 5035	09/18/18 15:00	5	09/24/18 10:05	
T182803-19 B61- 10.0 [Soil] Sampled 09/10/18 10:10 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/18/18 15:00	5	09/15/18 10:10	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 10:10	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 10:10	
8260 5035	09/18/18 15:00	5	09/24/18 10:10	
T182803-20 B61- 15.0 [Soil] Sampled 09/10/18 10:15 (GMT-08:00) Pacific Time (US &				**JAR MISLABELED**
6010 Title 22	09/18/18 15:00	5	09/15/18 10:15	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 10:15	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 10:15	
8260 5035	09/18/18 15:00	5	09/24/18 10:15	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-21 B02- 5.0 [Soil] Sampled 09/10/18 12:10 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 12:10	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 12:10	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 12:10	
8260 5035	09/18/18 15:00	5	09/24/18 12:10	
T182803-22 B02- 10.0 [Soil] Sampled 09/10/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 12:15	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 12:15	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 12:15	
8260 5035	09/18/18 15:00	5	09/24/18 12:15	
T182803-23 B02- 15.0 [Soil] Sampled 09/10/18 12:20 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 12:20	
8015 CC (D/MO)	09/18/18 15:00	5	09/24/18 12:20	
8015 m 5035-GRO	09/18/18 15:00	5	09/24/18 12:20	
8260 5035	09/18/18 15:00	5	09/24/18 12:20	
T182803-24 B06- 0.5 [Soil] Sampled 09/10/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 12:50	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 12:50	
T182803-25 B06- 1.5 [Soil] Sampled 09/10/18 12:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 12:51	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 12:51	
T182803-26 B06- 2.5 [Soil] Sampled 09/10/18 12:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 12:55	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 12:55	
T182803-27 B03- 0.5 [Soil] Sampled 09/10/18 13:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:00	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-28 B03- 1.5 [Soil] Sampled 09/10/18 13:02 (GMT-08:00) Pacific Time (US &				**STLC for Lead added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:02	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:02	
STLC Pb	11/28/18 15:00	5	03/09/19 13:02	
STLC Leaching Procedure Metals	11/28/18 15:00	5	09/24/18 13:02	
T182803-29 B03- 2.5 [Soil] Sampled 09/10/18 13:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:05	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:05	
T182803-30 B07- 0.5 [Soil] Sampled 09/10/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:20	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:20	
T182803-31 B07- 1.5 [Soil] Sampled 09/10/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:21	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:21	
T182803-32 B07- 2.5 [Soil] Sampled 09/10/18 13:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:25	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:25	
T182803-33 B08- 0.5 [Soil] Sampled 09/10/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:35	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:35	
T182803-34 B08- 1.5 [Soil] Sampled 09/10/18 13:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:36	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:36	
T182803-35 B08- 2.5 [Soil] Sampled 09/10/18 13:38 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:38	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:38	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-36 B09- 0.5 [Soil] Sampled 09/10/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:45	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:45	
T182803-37 B09- 1.5 [Soil] Sampled 09/10/18 13:46 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:46	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:46	
T182803-38 B09- 2.5 [Soil] Sampled 09/10/18 13:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 13:48	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 13:48	
T182803-39 B17- 0.5 [Soil] Sampled 09/10/18 14:09 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:09	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:09	
T182803-40 B17- 1.5 [Soil] Sampled 09/10/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:10	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:10	
T182803-41 B17- 2.5 [Soil] Sampled 09/10/18 14:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:12	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:12	
T182803-42 B10- 0.5 [Soil] Sampled 09/10/18 14:35 (GMT-08:00) Pacific Time (US &				**STLC for Lead added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:35	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:35	
STLC Pb	11/28/18 15:00	5	03/09/19 14:35	
STLC Leaching Procedure Metals	11/28/18 15:00	5	09/24/18 14:35	
T182803-43 B10- 1.5 [Soil] Sampled 09/10/18 14:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:37	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:37	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182803-44 B10- 2.5 [Soil] Sampled 09/10/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:40	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:40	
T182803-45 B27- 0.5 [Soil] Sampled 09/10/18 14:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:42	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:42	
T182803-46 B27- 1.5 [Soil] Sampled 09/10/18 14:23 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:23	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:23	
T182803-47 B27- 2.5 [Soil] Sampled 09/10/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:25	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:25	
T182803-48 B16- 0.5 [Soil] Sampled 09/10/18 14:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:50	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:50	
T182803-49 B16- 1.5 [Soil] Sampled 09/10/18 14:53 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:53	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:53	
T182803-50 B16- 2.5 [Soil] Sampled 09/10/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 14:55	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 14:55	

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182803

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182803-51 EB-02 [Water] Sampled 09/10/18 15:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/18/18 15:00	5	09/15/18 15:30	
6020 Metals by ICP-MS	09/18/18 15:00	5	03/09/19 15:30	As and Pb only
8015 CC (D/MO)	09/18/18 15:00	5	09/17/18 15:30	
8015 m Gas Purge	09/14/18 15:00	3	09/24/18 15:30	
8081 Pesticides	09/18/18 15:00	5	09/17/18 15:30	
8082 PCB	09/18/18 15:00	5	09/17/18 15:30	
8260	09/18/18 15:00	5	09/24/18 15:30	+OXY
8270C	09/18/18 15:00	5	09/17/18 15:30	
T182803-52 B65- 2.5 [Soil] Sampled 09/10/18 09:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/18/18 15:00	5	01/08/19 09:12	As and Pb only
8081 Pesticides	09/18/18 15:00	5	09/24/18 09:12	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

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27 September 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 18:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B4-2.5	T182898-01	Soil	09/19/18 07:45	09/19/18 18:56
B4-2.5 DUP	T182898-02	Soil	09/19/18 07:45	09/19/18 18:56
B4-5	T182898-03	Soil	09/19/18 07:47	09/19/18 18:56
B63-5.0(19)	T182898-04	Soil	09/19/18 08:45	09/19/18 18:56
B63-10.0(24)	T182898-05	Soil	09/19/18 08:48	09/19/18 18:56
B63-15.0(29)	T182898-06	Soil	09/19/18 08:50	09/19/18 18:56
B63-0.5	T182898-07	Soil	09/19/18 12:25	09/19/18 18:56
B63-1.5	T182898-08	Soil	09/19/18 12:28	09/19/18 18:56
B63-2.5	T182898-09	Soil	09/19/18 12:30	09/19/18 18:56
B66-0.5	T182898-10	Soil	09/19/18 12:45	09/19/18 18:56
B66-1.5	T182898-11	Soil	09/19/18 12:48	09/19/18 18:56
B66-2.5	T182898-12	Soil	09/19/18 12:50	09/19/18 18:56
B71-0.5	T182898-13	Soil	09/19/18 13:20	09/19/18 18:56
B64-0.5	T182898-14	Soil	09/19/18 13:30	09/19/18 18:56
B64-1.5	T182898-15	Soil	09/19/18 13:33	09/19/18 18:56
B64-2.5	T182898-16	Soil	09/19/18 13:35	09/19/18 18:56
B73-0.5	T182898-17	Soil	09/19/18 14:10	09/19/18 18:56
B73-1.5	T182898-18	Soil	09/19/18 14:13	09/19/18 18:56
B73-2.5	T182898-19	Soil	09/19/18 14:15	09/19/18 18:56
B74-0.5	T182898-20	Soil	09/19/18 14:25	09/19/18 18:56
B74-1.5	T182898-21	Soil	09/19/18 14:27	09/19/18 18:56
B74-2.5	T182898-22	Soil	09/19/18 14:30	09/19/18 18:56
B48-0.5	T182898-23	Soil	09/19/18 14:40	09/19/18 18:56
B48-1.5	T182898-24	Soil	09/19/18 14:43	09/19/18 18:56
B48-2.5	T182898-25	Soil	09/19/18 14:45	09/19/18 18:56
B18-0.5	T182898-26	Soil	09/19/18 14:55	09/19/18 18:56

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B18-1.5	T182898-27	Soil	09/19/18 14:57	09/19/18 18:56
B18-2.5	T182898-28	Soil	09/19/18 15:00	09/19/18 18:56
EB-03	T182898-29	Water	09/19/18 15:15	09/19/18 18:56

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

DETECTIONS SUMMARY

Sample ID: B4-2.5 **Laboratory ID:** T182898-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**16**	3.0	mg/kg	EPA 6010b	
Arsenic	**23**	5.0	mg/kg	EPA 6010b	
Barium	**200**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**18**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**13**	3.0	mg/kg	EPA 6010b	
Nickel	**40**	2.0	mg/kg	EPA 6010b	
Vanadium	**83**	5.0	mg/kg	EPA 6010b	
Zinc	**84**	1.0	mg/kg	EPA 6010b	

Sample ID: B4-2.5 DUP **Laboratory ID:** T182898-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**9.8**	3.0	mg/kg	EPA 6010b	
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**8.0**	3.0	mg/kg	EPA 6010b	
Nickel	**43**	2.0	mg/kg	EPA 6010b	
Vanadium	**84**	5.0	mg/kg	EPA 6010b	
Zinc	**84**	1.0	mg/kg	EPA 6010b	

Sample ID: B4-5 **Laboratory ID:** T182898-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**7.4**	3.0	mg/kg	EPA 6010b	
Arsenic	**16**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Sample ID: B4-5 **Laboratory ID:** T182898-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Chromium	**39**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**34**	1.0	mg/kg	EPA 6010b	
Lead	**6.3**	3.0	mg/kg	EPA 6010b	
Nickel	**36**	2.0	mg/kg	EPA 6010b	
Vanadium	**74**	5.0	mg/kg	EPA 6010b	
Zinc	**82**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-5.0(19) **Laboratory ID:** T182898-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	5.0	mg/kg	EPA 6010b	
Barium	**73**	1.0	mg/kg	EPA 6010b	
Chromium	**38**	2.0	mg/kg	EPA 6010b	
Cobalt	**12**	2.0	mg/kg	EPA 6010b	
Copper	**30**	1.0	mg/kg	EPA 6010b	
Nickel	**24**	2.0	mg/kg	EPA 6010b	
Vanadium	**58**	5.0	mg/kg	EPA 6010b	
Zinc	**54**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-10.0(24) **Laboratory ID:** T182898-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**11**	3.0	mg/kg	EPA 6010b	
Arsenic	**12**	5.0	mg/kg	EPA 6010b	
Barium	**56**	1.0	mg/kg	EPA 6010b	
Chromium	**35**	2.0	mg/kg	EPA 6010b	
Cobalt	**10**	2.0	mg/kg	EPA 6010b	
Copper	**22**	1.0	mg/kg	EPA 6010b	
Lead	**6.3**	3.0	mg/kg	EPA 6010b	
Nickel	**22**	2.0	mg/kg	EPA 6010b	
Vanadium	**49**	5.0	mg/kg	EPA 6010b	
Zinc	**46**	1.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Sample ID: B63-15.0(29) **Laboratory ID:** T182898-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.3**	5.0	mg/kg	EPA 6010b	
Barium	**41**	1.0	mg/kg	EPA 6010b	
Chromium	**23**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**15**	1.0	mg/kg	EPA 6010b	
Nickel	**18**	2.0	mg/kg	EPA 6010b	
Vanadium	**33**	5.0	mg/kg	EPA 6010b	
Zinc	**27**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-0.5 **Laboratory ID:** T182898-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**10**	0.25	mg/kg	6020 ICP-MS	
Lead	**3.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B63-1.5 **Laboratory ID:** T182898-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B63-2.5 **Laboratory ID:** T182898-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-0.5 **Laboratory ID:** T182898-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**25**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.5**	0.25	mg/kg	6020 ICP-MS	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Sample ID: B66-1.5 **Laboratory ID:** T182898-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-2.5 **Laboratory ID:** T182898-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B71-0.5 **Laboratory ID:** T182898-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-0.5 **Laboratory ID:** T182898-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**21**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-1.5 **Laboratory ID:** T182898-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-2.5 **Laboratory ID:** T182898-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**3.3**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	

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Kris Kubota, Project Manager Assistant

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Sample ID: B64-2.5 **Laboratory ID:** T182898-16

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4´-DDT	**6.6**	5.0	ug/kg	EPA 8081A	

Sample ID: B73-0.5 **Laboratory ID:** T182898-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.5**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B73-1.5 **Laboratory ID:** T182898-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B73-2.5 **Laboratory ID:** T182898-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-0.5 **Laboratory ID:** T182898-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-1.5 **Laboratory ID:** T182898-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Sample ID: B74-2.5 **Laboratory ID:** T182898-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-0.5 **Laboratory ID:** T182898-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-1.5 **Laboratory ID:** T182898-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-2.5 **Laboratory ID:** T182898-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B18-0.5 **Laboratory ID:** T182898-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**24**	0.25	mg/kg	6020 ICP-MS	
Lead	**26**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B18-1.5 **Laboratory ID:** T182898-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.1**	0.25	mg/kg	6020 ICP-MS	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Sample ID: B18-2.5 **Laboratory ID:** T182898-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**63**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	

Sample ID: EB-03 **Laboratory ID:** T182898-29

Analyte	Result	Reporting Limit	Units	Method	Notes
C6-C12 (GRO)	**73**	50	ug/l	EPA 8015B	
Lead	**0.038**	0.0040	ug/l	6020 ICP-MS	
Toluene	**47**	0.50	ug/l	EPA 8260B	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	340	ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*83.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*104 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**16**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**23**	5.0	"	"	"	"	"	"	
Barium	**200**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**18**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**13**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**40**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**83**	5.0	"	"	"	"	"	"	
Zinc	**84**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	3.3	"	"	"	"	"	"	
Bromodichloromethane	ND	3.3	"	"	"	"	"	"	
Bromoform	ND	3.3	"	"	"	"	"	"	
Bromomethane	ND	3.3	"	"	"	"	"	"	
n-Butylbenzene	ND	3.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.3	"	"	"	"	"	"	
Chlorobenzene	ND	3.3	"	"	"	"	"	"	
Chloroethane	ND	3.3	"	"	"	"	"	"	
Chloroform	ND	3.3	"	"	"	"	"	"	
Chloromethane	ND	3.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.3	"	"	"	"	"	"	
Dibromochloromethane	ND	3.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	6.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.3	"	"	"	"	"	"	
Dibromomethane	ND	3.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.3	"	"	"	"	"	"	
Isopropylbenzene	ND	3.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.3	"	"	"	"	"	"	
Methylene chloride	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
n-Propylbenzene	ND	3.3	"	"	"	"	"	"	
Styrene	ND	3.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.3	"	"	"	"	"	"	
Tetrachloroethene	ND	3.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.3	"	"	"	"	"	"	
Trichloroethene	ND	3.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.3	"	"	"	"	"	"	
Vinyl chloride	ND	3.3	"	"	"	"	"	"	
Benzene	ND	3.3	"	"	"	"	"	"	
Toluene	ND	3.3	"	"	"	"	"	"	
Ethylbenzene	ND	3.3	"	"	"	"	"	"	
m,p-Xylene	ND	6.6	"	"	"	"	"	"	
o-Xylene	ND	3.3	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*103 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*129 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*66.6 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*73.1 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*68.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*77.3 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*83.5 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*104 %*	*18-137*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*82.3 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*100 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**9.8**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**8.0**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**43**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**84**	5.0	"	"	"	"	"	"	
Zinc	**84**	1.0	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.5	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	3.5	"	"	"	"	"	"	
Bromodichloromethane	ND	3.5	"	"	"	"	"	"	
Bromoform	ND	3.5	"	"	"	"	"	"	
Bromomethane	ND	3.5	"	"	"	"	"	"	
n-Butylbenzene	ND	3.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.5	"	"	"	"	"	"	
Chlorobenzene	ND	3.5	"	"	"	"	"	"	
Chloroethane	ND	3.5	"	"	"	"	"	"	
Chloroform	ND	3.5	"	"	"	"	"	"	
Chloromethane	ND	3.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.5	"	"	"	"	"	"	
Dibromochloromethane	ND	3.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.5	"	"	"	"	"	"	
Dibromomethane	ND	3.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.5	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.5	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.5	"	"	"	"	"	"	
Isopropylbenzene	ND	3.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.5	"	"	"	"	"	"	
Methylene chloride	ND	3.5	"	"	"	"	"	"	
Naphthalene	ND	3.5	"	"	"	"	"	"	
n-Propylbenzene	ND	3.5	"	"	"	"	"	"	
Styrene	ND	3.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.5	"	"	"	"	"	"	
Tetrachloroethene	ND	3.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.5	"	"	"	"	"	"	
Trichloroethene	ND	3.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.5	"	"	"	"	"	"	
Vinyl chloride	ND	3.5	"	"	"	"	"	"	
Benzene	ND	3.5	"	"	"	"	"	"	
Toluene	ND	3.5	"	"	"	"	"	"	
Ethylbenzene	ND	3.5	"	"	"	"	"	"	
m,p-Xylene	ND	7.1	"	"	"	"	"	"	
o-Xylene	ND	3.5	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*125 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*59.9 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*65.9 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*61.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*71.0 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*78.0 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*97.0 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*107 %*		*18-137*	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	390	ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*87.4 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*108 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**7.4**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**16**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**39**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**34**	1.0	"	"	"	"	"	"	
Lead	**6.3**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**36**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**74**	5.0	"	"	"	"	"	"	
Zinc	**82**	1.0	"	"	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.3	"	"	"	"	"	"	
Bromodichloromethane	ND	5.3	"	"	"	"	"	"	
Bromoform	ND	5.3	"	"	"	"	"	"	
Bromomethane	ND	5.3	"	"	"	"	"	"	
n-Butylbenzene	ND	5.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.3	"	"	"	"	"	"	
Chlorobenzene	ND	5.3	"	"	"	"	"	"	
Chloroethane	ND	5.3	"	"	"	"	"	"	
Chloroform	ND	5.3	"	"	"	"	"	"	
Chloromethane	ND	5.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
Dibromochloromethane	ND	5.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.3	"	"	"	"	"	"	
Dibromomethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.3	"	"	"	"	"	"	
Isopropylbenzene	ND	5.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.3	"	"	"	"	"	"	
Methylene chloride	ND	5.3	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
n-Propylbenzene	ND	5.3	"	"	"	"	"	"	
Styrene	ND	5.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
Tetrachloroethene	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.3	"	"	"	"	"	"	
Trichloroethene	ND	5.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
Vinyl chloride	ND	5.3	"	"	"	"	"	"	
Benzene	ND	5.3	"	"	"	"	"	"	
Toluene	ND	5.3	"	"	"	"	"	"	
Ethylbenzene	ND	5.3	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*126 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*60.9 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*67.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*62.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*68.3 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*77.1 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*86.5 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*	*18-137*		"	"	"	"	

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B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	370	ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*131 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*107 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**18**	5.0	"	"	"	"	"	"	
Barium	**73**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**38**	2.0	"	"	"	"	"	"	
Cobalt	**12**	2.0	"	"	"	"	"	"	
Copper	**30**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**24**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**58**	5.0	"	"	"	"	"	"	
Zinc	**54**	1.0	"	"	"	"	"	"	

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B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.8	ug/kg	1	8092008	09/20/18	09/27/18	EPA 8260B/5035	
Bromochloromethane	ND	5.8	"	"	"	"	"	"	
Bromodichloromethane	ND	5.8	"	"	"	"	"	"	
Bromoform	ND	5.8	"	"	"	"	"	"	
Bromomethane	ND	5.8	"	"	"	"	"	"	
n-Butylbenzene	ND	5.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.8	"	"	"	"	"	"	
Chlorobenzene	ND	5.8	"	"	"	"	"	"	
Chloroethane	ND	5.8	"	"	"	"	"	"	
Chloroform	ND	5.8	"	"	"	"	"	"	
Chloromethane	ND	5.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
Dibromochloromethane	ND	5.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.8	"	"	"	"	"	"	
Dibromomethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	

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B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.8	ug/kg	1	8092008	09/20/18	09/27/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.8	"	"	"	"	"	"	
Isopropylbenzene	ND	5.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.8	"	"	"	"	"	"	
Methylene chloride	ND	5.8	"	"	"	"	"	"	
Naphthalene	ND	5.8	"	"	"	"	"	"	
n-Propylbenzene	ND	5.8	"	"	"	"	"	"	
Styrene	ND	5.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
Tetrachloroethene	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.8	"	"	"	"	"	"	
Trichloroethene	ND	5.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
Vinyl chloride	ND	5.8	"	"	"	"	"	"	
Benzene	ND	5.8	"	"	"	"	"	"	
Toluene	ND	5.8	"	"	"	"	"	"	
Ethylbenzene	ND	5.8	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	5.8	"	"	"	"	"	"	

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B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8092008*	*09/20/18*	*09/27/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*106 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*68.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*109 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**11**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**12**	5.0	"	"	"	"	"	"	
Barium	**56**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**35**	2.0	"	"	"	"	"	"	
Cobalt	**10**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Lead	**6.3**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**22**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**49**	5.0	"	"	"	"	"	"	
Zinc	**46**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.0	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.0	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Surrogate: Toluene-d8		*105 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*
Surrogate: 4-Bromofluorobenzene		*105 %*	*85.9-114*		*"*	*"*	*"*	*"*
Surrogate: Dibromofluoromethane		*121 %*	*77.8-142*		*"*	*"*	*"*	*"*

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	560	ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*72.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*106 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**8.3**	5.0	"	"	"	"	"	"	
Barium	**41**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**23**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**15**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**18**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**33**	5.0	"	"	"	"	"	"	
Zinc	**27**	1.0	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.4	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.4	"	"	"	"	"	"	
Bromodichloromethane	ND	5.4	"	"	"	"	"	"	
Bromoform	ND	5.4	"	"	"	"	"	"	
Bromomethane	ND	5.4	"	"	"	"	"	"	
n-Butylbenzene	ND	5.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.4	"	"	"	"	"	"	
Chlorobenzene	ND	5.4	"	"	"	"	"	"	
Chloroethane	ND	5.4	"	"	"	"	"	"	
Chloroform	ND	5.4	"	"	"	"	"	"	
Chloromethane	ND	5.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.4	"	"	"	"	"	"	
Dibromochloromethane	ND	5.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.4	"	"	"	"	"	"	
Dibromomethane	ND	5.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.4	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.4	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.4	"	"	"	"	"	"	
Isopropylbenzene	ND	5.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.4	"	"	"	"	"	"	
Methylene chloride	ND	5.4	"	"	"	"	"	"	
Naphthalene	ND	5.4	"	"	"	"	"	"	
n-Propylbenzene	ND	5.4	"	"	"	"	"	"	
Styrene	ND	5.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.4	"	"	"	"	"	"	
Tetrachloroethene	ND	5.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.4	"	"	"	"	"	"	
Trichloroethene	ND	5.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.4	"	"	"	"	"	"	
Vinyl chloride	ND	5.4	"	"	"	"	"	"	
Benzene	ND	5.4	"	"	"	"	"	"	
Toluene	ND	5.4	"	"	"	"	"	"	
Ethylbenzene	ND	5.4	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.4	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*127 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B63-0.5

T182898-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**10**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**3.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*83.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B63-1.5

T182898-08 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**23**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*85.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-2.5

T182898-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*84.0 %*	*35-140*		"	"	"	"	

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B66-0.5

T182898-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**25**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*87.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B66-1.5

T182898-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*78.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B66-2.5

T182898-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*91.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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B71-0.5

T182898-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*85.4 %*	*35-140*		"	"	"	"	

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B64-0.5

T182898-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**21**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*85.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B64-1.5

T182898-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B64-2.5

T182898-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**3.3**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	**6.6**	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*79.8 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B73-0.5

T182898-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**6.5**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*84.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B73-1.5

T182898-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*83.4 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B73-2.5

T182898-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*74.3 %*	*35-140*		"	"	"	"	

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B74-0.5

T182898-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**11**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**9.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*81.4 %*	*35-140*		"	"	"	"	

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B74-1.5

T182898-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B74-2.5

T182898-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*54.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*64.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B48-0.5

T182898-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B48-1.5

T182898-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*70.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B48-2.5

T182898-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*60.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B18-0.5

T182898-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**24**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**26**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*65.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B18-1.5

T182898-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092104	09/21/18	09/24/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B18-2.5

T182898-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**63**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092104	09/21/18	09/24/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.3 %*	*35-140*		"	"	"	"	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	**73**	50	ug/l	1	8092114	09/21/18	09/24/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*94.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8092417	09/24/18	09/26/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8092013	09/20/18	09/26/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	"	"	
Cadmium	ND	50	"	"	"	"	"	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	0.0020	ug/l	1	8092012	09/20/18	09/25/18	6020 ICP-MS	
Lead	**0.038**	0.0040	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8092024	09/20/18	09/24/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8092023	09/20/18	09/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*58.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*75.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8092002	09/20/18	09/21/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	

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T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8092002	09/20/18	09/21/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**47**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*	*92.6-108*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

SunStar Laboratories, Inc.

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Carbazole	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
Phenol	ND	10	"	"	"	"	"	"	
Aniline	ND	10	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
Acenaphthylene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1-Methylnaphthalene	ND	10	"	"	"	"	"	"	
2-Methylnaphthalene	ND	20	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10	"	"	"	"	"	"	
Acenaphthene	ND	10	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	20	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Benzyl alcohol	ND	50	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	20	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	20	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	20	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Chrysene	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	20	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
Diethyl phthalate	ND	10	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	10	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	5.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	20	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	20	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	20	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	10	"	"	"	"	"	"	
2-Methylphenol	ND	10	"	"	"	"	"	"	
4-Methylphenol	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	20	"	"	"	"	"	"	
2-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	25	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Phenanthrene	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
2,4,5-Trichlorophenol	ND	20	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
1,4-Dinitrobenzene	ND	10	"	"	"	"	"	"	
Pyridine	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*58.2 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*52.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*76.8 %*	*14.7-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*86.1 %*	*33.3-110*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*91.0 %*	*12.9-110*		"	"	"	"	
Surrogate: Terphenyl-dl4		*93.9 %*	*15.8-136*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	1.00	ug/l	1	8092027	09/20/18	09/24/18	EPA 8270C SIM	
Acenaphthylene	ND	1.00	"	"	"	"	"	"	
Anthracene	ND	1.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	1.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	1.00	"	"	"	"	"	"	
Chrysene	ND	1.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	1.00	"	"	"	"	"	"	
Fluoranthene	ND	1.00	"	"	"	"	"	"	
Fluorene	ND	1.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	1.00	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
Phenanthrene	ND	1.00	"	"	"	"	"	"	
Pyrene	ND	1.00	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*117 %*	*33-141*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092009 - EPA 5035 GC										
Blank (8092009-BLK1)				Prepared & Analyzed: 09/20/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*104*		*"*	*100*		*104*	*65-135*			
LCS (8092009-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
C6-C12 (GRO)	8480	500	ug/kg	11000		77.1	75-125			
Surrogate: 4-Bromofluorobenzene	*106*		*"*	*100*		*106*	*65-135*			
LCS Dup (8092009-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
C6-C12 (GRO)	10100	500	ug/kg	11000		91.5	75-125	17.1	20	
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*65-135*			
Batch 8092114 - EPA 5030 GC										
Blank (8092114-BLK1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*82.0*		*"*	*100*		*82.0*	*65-135*			
LCS (8092114-BS1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	930	50	ug/l	996		93.4	75-125			
Surrogate: 4-Bromofluorobenzene	*97.0*		*"*	*100*		*97.0*	*65-135*			
LCS Dup (8092114-BSD1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	987	50	ug/l	996		99.1	75-125	5.95	20	
Surrogate: 4-Bromofluorobenzene	*90.4*		*"*	*100*		*90.4*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092025 - EPA 3550B GC										
Blank (8092025-BLK1)				Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*99.6*		*"*	*100*		*99.6*	*65-135*			
LCS (8092025-BS1)				Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	560	10	mg/kg	500		112	75-125			
Surrogate: p-Terphenyl	*98.8*		*"*	*100*		*98.8*	*65-135*			
Matrix Spike (8092025-MS1)		**Source: T182898-02**		Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	530	10	mg/kg	500	ND	107	75-125			
Surrogate: p-Terphenyl	*94.3*		*"*	*100*		*94.3*	*65-135*			
Matrix Spike Dup (8092025-MSD1)		**Source: T182898-02**		Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	590	10	mg/kg	490	ND	121	75-125	10.9	20	
Surrogate: p-Terphenyl	*105*		*"*	*98.0*		*107*	*65-135*			
Batch 8092417 - EPA 3510C GC										
Blank (8092417-BLK1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*3.86*		*"*	*4.00*		*96.4*	*65-135*			
LCS (8092417-BS1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	16.8	0.50	mg/l	20.0		83.8	75-125			
Surrogate: p-Terphenyl	*3.83*		*"*	*4.00*		*95.7*	*65-135*			

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Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092417 - EPA 3510C GC										
LCS Dup (8092417-BSD1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	17.0	0.50	mg/l	20.0		84.9	75-125	1.31	20	
Surrogate: p-Terphenyl	*3.82*		*"*	*4.00*		*95.5*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092013 - EPA 3010A										
Blank (8092013-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8092013-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	486	50	ug/l	500		97.2	75-125			
Barium	515	50	"	500		103	75-125			
Cadmium	504	50	"	500		101	75-125			
Chromium	512	50	"	500		102	75-125			
Lead	523	50	"	500		105	75-125			
Matrix Spike (8092013-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	505	50	ug/l	500	ND	101	75-125			
Barium	487	50	"	500	ND	97.3	75-125			
Cadmium	474	50	"	500	ND	94.8	75-125			
Chromium	484	50	"	500	ND	96.7	75-125			
Lead	495	50	"	500	ND	99.0	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092013 - EPA 3010A										
Matrix Spike Dup (8092013-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	491	50	ug/l	500	ND	98.1	75-125	2.92	20	
Barium	498	50	"	500	ND	99.6	75-125	2.37	20	
Cadmium	489	50	"	500	ND	97.9	75-125	3.13	20	
Chromium	495	50	"	500	ND	99.0	75-125	2.34	20	
Lead	513	50	"	500	ND	103	75-125	3.54	20	
Batch 8092421 - EPA 3050B										
Blank (8092421-BLK1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8092421-BS1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	106	5.0	mg/kg	100		106	75-125			
Barium	106	1.0	"	100		106	75-125			
Cadmium	106	2.0	"	100		106	75-125			
Chromium	106	2.0	"	100		106	75-125			
Lead	104	3.0	"	100		104	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092421 - EPA 3050B										
Matrix Spike (8092421-MS1)		**Source: T182898-01**		Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	126	5.0	mg/kg	99.0	22.8	104	75-125			
Barium	285	1.0	"	99.0	204	81.7	75-125			
Cadmium	112	2.0	"	99.0	ND	113	75-125			
Chromium	147	2.0	"	99.0	42.5	106	75-125			
Lead	107	3.0	"	99.0	13.4	94.7	75-125			
Matrix Spike Dup (8092421-MSD1)		**Source: T182898-01**		Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	128	5.0	mg/kg	98.0	22.8	107	75-125	1.57	20	
Barium	296	1.0	"	98.0	204	94.0	75-125	3.86	20	
Cadmium	110	2.0	"	98.0	ND	113	75-125	1.33	20	
Chromium	148	2.0	"	98.0	42.5	108	75-125	0.584	20	
Lead	108	3.0	"	98.0	13.4	96.3	75-125	0.632	20	

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092010 - EPA 3051										
Blank (8092010-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8092010-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	24.3	0.25	mg/kg	25.0		97.2	80-120			
Lead	24.6	0.25	"	25.0		98.5	80-120			
Matrix Spike (8092010-MS1)		**Source: T182898-07**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	35.1	0.25	mg/kg	25.0	10.3	99.1	75-125			
Lead	30.6	0.25	"	25.0	3.73	107	75-125			
Matrix Spike (8092010-MS2)		**Source: T182898-08**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	58.9	0.25	mg/kg	25.0	22.6	145	75-125			QM-05
Lead	45.3	0.25	"	25.0	6.53	155	75-125			QM-05
Matrix Spike Dup (8092010-MSD1)		**Source: T182898-07**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	47.2	0.25	mg/kg	25.0	10.3	147	75-125	29.4	20	QR-04
Lead	37.0	0.25	"	25.0	3.73	133	75-125	19.1	20	QR-04
Batch 8092011 - EPA 3051										
Blank (8092011-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Antimony	ND	0.25	mg/kg							
Arsenic	ND	0.25	"							
Barium	ND	0.25	"							
Beryllium	ND	0.25	"							
Cadmium	ND	0.25	"							
Chromium	ND	0.25	"							
Cobalt	ND	0.25	"							
Copper	ND	0.25	"							
Lead	ND	0.25	"							
Mercury	ND	0.025	"							
Molybdenum	ND	0.25	"							
Nickel	ND	0.25	"							
Selenium	ND	1.2	"							
Silver	ND	0.25	"							
Thallium	ND	0.25	"							
Vanadium	ND	0.25	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092011 - EPA 3051										
Blank (8092011-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Zinc	ND	0.25	mg/kg							
Manganese	ND	0.25	"							
LCS (8092011-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	24.5	0.25	mg/kg	25.0		97.8	80-120			
Barium	24.3	0.25	"	25.0		97.3	80-120			
Cadmium	24.0	0.25	"	25.0		96.1	80-120			
Chromium	24.5	0.25	"	25.0		97.9	80-120			
Lead	24.5	0.25	"	25.0		98.1	80-120			
Duplicate (8092011-DUP1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	25.1	1.2	mg/kg		23.7			6.05	200	
Barium	118	1.2	"		111			5.97	200	
Beryllium	0.587	1.2	"		0.524			11.4	200	
Cadmium	1.08	1.2	"		1.12			3.41	200	
Chromium	31.4	1.2	"		89.7			96.3	200	
Cobalt	9.75	1.2	"		9.80			0.493	200	
Copper	26.0	1.2	"		25.6			1.55	200	
Lead	27.2	1.2	"		25.9			5.03	200	
Mercury	0.115	0.12	"		0.0521			75.1	200	
Molybdenum	2.15	1.2	"		23.4			166	200	
Nickel	24.0	1.2	"		52.8			74.9	200	
Selenium	0.527	6.2	"		0.411			24.6	200	
Silver	ND	1.2	"		ND				200	
Thallium	ND	1.2	"		ND				200	
Vanadium	51.4	1.2	"		50.3			2.14	200	
Zinc	82.3	1.2	"		90.8			9.79	200	
Manganese	ND	1.2	"		ND				200	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092011 - EPA 3051										
Matrix Spike (8092011-MS1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	41.9	0.25	mg/kg	25.0	23.7	73.0	75-125			QR-04
Barium	143	0.25	"	25.0	111	127	75-125			QM-PS
Cadmium	23.8	0.25	"	25.0	1.12	90.9	75-125			
Chromium	50.6	0.25	"	25.0	89.7	NR	75-125			QM-PS
Lead	48.5	0.25	"	25.0	25.9	90.3	75-125			
Matrix Spike Dup (8092011-MSD1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	44.9	0.25	mg/kg	25.0	23.7	85.1	75-125	6.97	20	
Barium	157	0.25	"	25.0	111	185	75-125	9.51	20	QM-PS
Cadmium	24.6	0.25	"	25.0	1.12	93.8	75-125	2.96	20	
Chromium	54.4	0.25	"	25.0	89.7	NR	75-125	7.26	20	QM-PS
Lead	45.4	0.25	"	25.0	25.9	78.2	75-125	6.43	20	
Post Spike (8092011-PS1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Barium	147		mg/kg	25.0	111	144	80-120			QM-PS
Chromium	55.0		"	25.0	89.7	NR	80-120			QM-PS
Batch 8092012 - EPA 3010A										
Blank (8092012-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	ND	0.0020	ug/l							
Lead	ND	0.0040	"							
LCS (8092012-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	51.2	0.0020	ug/l	50.0		102	80-120			
Lead	49.9	0.0040	"	50.0		99.8	80-120			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092012 - EPA 3010A										
Matrix Spike (8092012-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	48.1	0.0020	ug/l	50.0	ND	96.2	75-125			
Lead	47.6	0.0040	"	50.0	0.0380	95.1	75-125			
Matrix Spike Dup (8092012-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	51.0	0.0020	ug/l	50.0	ND	102	75-125	5.84	20	
Lead	50.0	0.0040	"	50.0	0.0380	100	75-125	5.04	20	

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Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092020 - EPA 7471A Soil										
Blank (8092020-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	ND	0.10	mg/kg							
LCS (8092020-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.355	0.10	mg/kg	0.410		86.7	80-120			
Matrix Spike (8092020-MS1)		**Source: T182898-01**		Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.358	0.10	mg/kg	0.397	ND	90.1	75-125			
Matrix Spike Dup (8092020-MSD1)		**Source: T182898-01**		Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.356	0.10	mg/kg	0.403	ND	88.3	75-125	0.508	20	
Batch 8092024 - EPA 7470A Water										
Blank (8092024-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	ND	0.50	ug/l							
LCS (8092024-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	4.11	0.50	ug/l	5.00		82.1	80-120			
Matrix Spike (8092024-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	3.98	0.50	ug/l	5.00	ND	79.5	75-125			
Matrix Spike Dup (8092024-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	4.01	0.50	ug/l	5.00	ND	80.2	75-125	0.890	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092014 - EPA 3550 ECD/GCMS										
Blank (8092014-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.06*		*"*	*9.80*		*72.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.03*		*"*	*9.80*		*81.9*	*35-140*			
LCS (8092014-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
gamma-BHC (Lindane)	29.8	5.0	ug/kg	39.2		76.1	40-120			
Heptachlor	28.9	5.0	"	39.2		73.8	40-120			
Aldrin	32.2	5.0	"	39.2		82.1	40-120			
Dieldrin	32.1	5.0	"	39.2		81.8	40-120			
Endrin	25.1	5.0	"	39.2		64.0	40-120			
4,4´-DDT	19.9	5.0	"	39.2		50.7	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.33*		*"*	*9.80*		*74.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.43*		*"*	*9.80*		*86.0*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092014 - EPA 3550 ECD/GCMS										
LCS Dup (8092014-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
gamma-BHC (Lindane)	31.1	5.0	ug/kg	39.2		79.3	40-120	4.13	30	
Heptachlor	30.3	5.0	"	39.2		77.3	40-120	4.64	30	
Aldrin	33.0	5.0	"	39.2		84.1	40-120	2.41	30	
Dieldrin	33.4	5.0	"	39.2		85.2	40-120	4.07	30	
Endrin	26.1	5.0	"	39.2		66.5	40-120	3.89	30	
4,4´-DDT	21.3	5.0	"	39.2		54.4	33-147	7.17	30	
Surrogate: Tetrachloro-meta-xylene	*7.22*		*"*	*9.80*		*73.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.52*		*"*	*9.80*		*87.0*	*35-140*			
Batch 8092023 - EPA 3510C GCMS/ECD										
Blank (8092023-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*64.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.816*		*"*	*1.00*		*81.6*	*35-140*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092023 - EPA 3510C GCMS/ECD										
LCS (8092023-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.30	1.00	ug/l	4.00		57.4	40-120			
Heptachlor	2.42	1.00	"	4.00		60.6	40-120			
Aldrin	2.04	1.00	"	4.00		51.0	40-120			
Dieldrin	2.58	1.00	"	4.00		64.5	40-120			
Endrin	2.58	1.00	"	4.00		64.6	40-120			
4,4´-DDT	2.41	2.00	"	4.00		60.4	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.508*		*"*	*1.00*		*50.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.684*		*"*	*1.00*		*68.4*	*35-140*			
Matrix Spike (8092023-MS1)		**Source: T182893-01**		Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.46	1.00	ug/l	4.00	ND	61.5	20-120			
Heptachlor	2.65	1.00	"	4.00	ND	66.2	20-120			
Aldrin	2.35	1.00	"	4.00	ND	58.7	20-120			
Dieldrin	2.69	1.00	"	4.00	ND	67.3	20-120			
Endrin	2.69	1.00	"	4.00	ND	67.2	20-120			
4,4´-DDT	2.57	2.00	"	4.00	ND	64.3	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.576*		*"*	*1.00*		*57.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.734*		*"*	*1.00*		*73.4*	*35-140*			
Matrix Spike Dup (8092023-MSD1)		**Source: T182893-01**		Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.48	1.00	ug/l	4.00	ND	62.0	20-120	0.774	30	
Heptachlor	2.61	1.00	"	4.00	ND	65.3	20-120	1.31	30	
Aldrin	2.31	1.00	"	4.00	ND	57.7	20-120	1.69	30	
Dieldrin	2.72	1.00	"	4.00	ND	68.1	20-120	1.15	30	
Endrin	2.74	1.00	"	4.00	ND	68.6	20-120	2.06	30	
4,4´-DDT	2.62	2.00	"	4.00	ND	65.6	20-120	2.02	30	
Surrogate: Tetrachloro-meta-xylene	*0.517*		*"*	*1.00*		*51.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.682*		*"*	*1.00*		*68.2*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092104 - EPA 3550 ECD/GCMS										
Blank (8092104-BLK1)				Prepared: 09/21/18 Analyzed: 09/24/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.32*		*"*	*10.0*		*73.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.41*		*"*	*10.0*		*74.1*	*35-140*			
LCS (8092104-BS1)				Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	31.2	5.0	ug/kg	40.0		78.0	40-120			
Heptachlor	31.2	5.0	"	40.0		78.1	40-120			
Aldrin	30.3	5.0	"	40.0		75.7	40-120			
Dieldrin	30.8	5.0	"	40.0		77.0	40-120			
Endrin	30.5	5.0	"	40.0		76.3	40-120			
4,4´-DDT	21.0	5.0	"	40.0		52.5	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.38*		*"*	*10.0*		*73.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.75*		*"*	*10.0*		*77.5*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092104 - EPA 3550 ECD/GCMS										
Matrix Spike (8092104-MS1)		**Source: T182894-05**		Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	30.6	5.0	ug/kg	40.4	ND	75.8	30-120			
Heptachlor	31.7	5.0	"	40.4	ND	78.4	30-120			
Aldrin	30.7	5.0	"	40.4	ND	75.9	30-120			
Dieldrin	26.7	5.0	"	40.4	ND	66.1	30-120			
Endrin	26.2	5.0	"	40.4	ND	64.8	30-120			
4,4´-DDT	37.9	5.0	"	40.4	6.38	78.0	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.51*		*"*	*10.1*		*74.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.08*		*"*	*10.1*		*80.0*	*35-140*			
Matrix Spike Dup (8092104-MSD1)		**Source: T182894-05**		Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	27.4	5.0	ug/kg	40.0	ND	68.5	30-120	10.1	30	
Heptachlor	28.3	5.0	"	40.0	ND	70.8	30-120	10.2	30	
Aldrin	27.8	5.0	"	40.0	ND	69.5	30-120	8.85	30	
Dieldrin	22.8	5.0	"	40.0	ND	57.0	30-120	14.9	30	
Endrin	22.4	5.0	"	40.0	ND	56.0	30-120	14.5	30	
4,4´-DDT	33.5	5.0	"	40.0	6.38	67.8	30-120	13.9	30	
Surrogate: Tetrachloro-meta-xylene	*6.79*		*"*	*10.0*		*67.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.14*		*"*	*10.0*		*71.4*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
Blank (8092002-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
Blank (8092002-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.2*		*"*	*20.0*		*96.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.1*		*"*	*20.0*		*100*	*71.5-128*			
Surrogate: Toluene-d8	*19.9*		*"*	*20.0*		*99.3*	*92.6-108*			
LCS (8092002-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Chlorobenzene	17.1	1.0	ug/l	20.0		85.6	79.3-117			
1,1-Dichloroethene	15.2	1.0	"	20.0		76.0	68.3-130			
Trichloroethene	16.6	1.0	"	20.0		82.8	82.4-119			
Benzene	17.3	0.50	"	20.0		86.5	79.9-118			
Toluene	16.8	0.50	"	20.0		84.0	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.4*		*"*	*20.0*		*97.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.5*		*"*	*20.0*		*103*	*71.5-128*			
Surrogate: Toluene-d8	*20.4*		*"*	*20.0*		*102*	*92.6-108*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
LCS Dup (8092002-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Chlorobenzene	18.8	1.0	ug/l	20.0		94.2	79.3-117	9.62	20	
1,1-Dichloroethene	17.2	1.0	"	20.0		85.9	68.3-130	12.2	20	
Trichloroethene	17.8	1.0	"	20.0		89.0	82.4-119	7.22	20	
Benzene	18.9	0.50	"	20.0		94.6	79.9-118	9.00	20	
Toluene	18.5	0.50	"	20.0		92.4	78.7-116	9.47	20	
Surrogate: 4-Bromofluorobenzene	*19.6*		*"*	*20.0*		*98.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.8*		*"*	*20.0*		*104*	*71.5-128*			
Surrogate: Toluene-d8	*20.1*		*"*	*20.0*		*100*	*92.6-108*			
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	9.9	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	9.9	"							
o-Xylene	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Surrogate: Toluene-d8	*41.4*		*ug/kg*	*39.7*		*104*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.8*		*"*	*39.7*		*103*	*85.9-114*			
Surrogate: Dibromofluoromethane	*48.1*		*"*	*39.7*		*121*	*77.8-142*			
LCS (8092008-BS1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Chlorobenzene	30.5	5.0	ug/kg	39.7		77.0	75-125			
1,1-Dichloroethene	34.5	5.0	"	39.7		86.9	75-125			
Trichloroethene	30.9	5.0	"	39.7		78.0	75-125			
Benzene	37.2	5.0	"	39.7		93.8	75-125			
Toluene	33.0	5.0	"	39.7		83.0	75-125			
Surrogate: Toluene-d8	*38.8*		*"*	*39.7*		*97.9*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*37.8*		*"*	*39.7*		*95.2*	*85.9-114*			
Surrogate: Dibromofluoromethane	*50.8*		*"*	*39.7*		*128*	*77.8-142*			
LCS Dup (8092008-BSD1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Chlorobenzene	32.0	5.0	ug/kg	39.7		80.6	75-125	4.63	20	
1,1-Dichloroethene	35.4	5.0	"	39.7		89.3	75-125	2.73	20	
Trichloroethene	30.4	5.0	"	39.7		76.5	75-125	1.88	20	
Benzene	35.9	5.0	"	39.7		90.6	75-125	3.58	20	
Toluene	30.6	5.0	"	39.7		77.2	75-125	7.37	20	
Surrogate: Toluene-d8	*38.8*		*"*	*39.7*		*97.7*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*41.7*		*"*	*39.7*		*105*	*85.9-114*			
Surrogate: Dibromofluoromethane	*53.3*		*"*	*39.7*		*134*	*77.8-142*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Carbazole	ND	10	ug/l							
Aniline	ND	10	"							
Phenol	ND	10	"							
Acenaphthylene	ND	10	"							
2-Chlorophenol	ND	10	"							
1,4-Dichlorobenzene	ND	10	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Anthracene	ND	10	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	10	"							
2-Methylnaphthalene	ND	20	"							
1-Methylnaphthalene	ND	10	"							
Benzo (a) anthracene	ND	10	"							
Acenaphthene	ND	10	"							
4-Nitrophenol	ND	10	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
2,4-Dinitrotoluene	ND	10	"							
Pentachlorophenol	ND	10	"							
Benzo (g,h,i) perylene	ND	20	"							
Pyrene	ND	10	"							
Benzo (a) pyrene	ND	10	"							
Benzyl alcohol	ND	50	"							
Bis(2-chloroethoxy)methane	ND	10	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	20	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	10	"							
4-Chloroaniline	ND	20	"							
2-Chloronaphthalene	ND	10	"							
4-Chlorophenyl phenyl ether	ND	20	"							
Chrysene	ND	10	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	20	"							
Di-n-butyl phthalate	ND	5.0	"							

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
1,2-Dichlorobenzene	ND	5.0	ug/l							
1,3-Dichlorobenzene	ND	5.0	"							
2,4-Dichlorophenol	ND	10	"							
Diethyl phthalate	ND	10	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	10	"							
4,6-Dinitro-2-methylphenol	ND	5.0	"							
2,4-Dinitrophenol	ND	10	"							
2,6-Dinitrotoluene	ND	20	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Hexachlorobenzene	ND	20	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	20	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	10	"							
2-Methylphenol	ND	10	"							
4-Methylphenol	ND	20	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	20	"							
2-Nitrophenol	ND	10	"							
N-Nitrosodiphenylamine	ND	10	"							
N-Nitrosodimethylamine	ND	25	"							
Phenanthrene	ND	10	"							
2,4,5-Trichlorophenol	ND	20	"							
2,4,6-Trichlorophenol	ND	10	"							
2,3,4,6-Tetrachlorophenol	ND	10	"							
2,3,5,6-Tetrachlorophenol	ND	10	"							
1,4-Dinitrobenzene	ND	10	"							
Pyridine	ND	10	"							

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Surrogate: 2-Fluorophenol	*88.9*		*ug/l*	*200*		*44.5*	*15-121*			
Surrogate: Phenol-d6	*80.4*		*"*	*200*		*40.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*123*		*"*	*200*		*61.7*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*147*		*"*	*200*		*73.6*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*159*		*"*	*200*		*79.6*	*12.9-110*			
Surrogate: Terphenyl-dl4	*168*		*"*	*200*		*84.2*	*15.8-136*			
LCS (8092026-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Phenol	76.9	10	ug/l	200		38.4	12-89			
2-Chlorophenol	119	10	"	200		59.3	40-120			
1,4-Dichlorobenzene	105	10	"	200		52.7	33-94			
N-Nitrosodi-n-propylamine	128	5.0	"	200		64.0	40-120			
1,2,4-Trichlorobenzene	126	5.0	"	200		63.1	40-120			
4-Chloro-3-methylphenol	134	10	"	200		67.1	50-130			
Acenaphthene	148	10	"	200		74.0	50-130			
4-Nitrophenol	107	10	"	200		53.6	10-80			
2,4-Dinitrotoluene	146	10	"	200		73.0	24-96			
Pentachlorophenol	188	10	"	200		94.1	50-130			
Pyrene	162	10	"	200		80.9	26-127			
Surrogate: 2-Fluorophenol	*88.8*		*"*	*200*		*44.4*	*15-121*			
Surrogate: Phenol-d6	*81.0*		*"*	*200*		*40.5*	*24-113*			
Surrogate: Nitrobenzene-d5	*130*		*"*	*200*		*65.1*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*157*		*"*	*200*		*78.5*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*170*		*"*	*200*		*84.9*	*12.9-110*			
Surrogate: Terphenyl-dl4	*183*		*"*	*200*		*91.4*	*15.8-136*			
LCS Dup (8092026-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Phenol	95.3	10	ug/l	200		47.6	12-89	21.3	42	
2-Chlorophenol	136	10	"	200		68.0	40-120	13.8	40	
1,4-Dichlorobenzene	124	10	"	200		61.8	33-94	16.0	28	
N-Nitrosodi-n-propylamine	148	5.0	"	200		74.2	40-120	14.8	38	
1,2,4-Trichlorobenzene	134	5.0	"	200		66.9	40-120	5.85	28	
4-Chloro-3-methylphenol	148	10	"	200		74.1	50-130	10.0	42	
Acenaphthene	161	10	"	200		80.5	50-130	8.40	31	
4-Nitrophenol	106	10	"	200		52.8	10-80	1.60	50	
2,4-Dinitrotoluene	158	10	"	200		79.0	24-96	7.90	38	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
LCS Dup (8092026-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Pentachlorophenol	217	10	ug/l	200		108	50-130	14.1	50	
Pyrene	172	10	"	200		86.1	26-127	6.28	31	
Surrogate: 2-Fluorophenol	*103*		*"*	*200*		*51.6*	*15-121*			
Surrogate: Phenol-d6	*98.1*		*"*	*200*		*49.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*142*		*"*	*200*		*70.9*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*169*		*"*	*200*		*84.4*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*184*		*"*	*200*		*91.8*	*12.9-110*			
Surrogate: Terphenyl-dl4	*189*		*"*	*200*		*94.5*	*15.8-136*			
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Carbazole	ND	300	ug/kg							
Phenol	ND	1000	"							
Aniline	ND	300	"							
2-Chlorophenol	ND	1000	"							
1,4-Dichlorobenzene	ND	300	"							
N-Nitrosodi-n-propylamine	ND	300	"							
1,2,4-Trichlorobenzene	ND	300	"							
4-Chloro-3-methylphenol	ND	1000	"							
2-Methylnaphthalene	ND	300	"							
1-Methylnaphthalene	ND	300	"							
Acenaphthene	ND	300	"							
4-Nitrophenol	ND	1000	"							
2,4-Dinitrotoluene	ND	300	"							
Pentachlorophenol	ND	1000	"							
Pyrene	ND	300	"							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Benzyl alcohol	ND	300	"							
Bis(2-chloroethoxy)methane	ND	300	"							

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Bis(2-chloroethyl)ether	ND	300	ug/kg							
Bis(2-chloroisopropyl)ether	ND	300	"							
Bis(2-ethylhexyl)phthalate	ND	300	"							
4-Bromophenyl phenyl ether	ND	300	"							
Butyl benzyl phthalate	ND	300	"							
4-Chloroaniline	ND	300	"							
2-Chloronaphthalene	ND	300	"							
4-Chlorophenyl phenyl ether	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Dibenzofuran	ND	300	"							
Di-n-butyl phthalate	ND	300	"							
1,2-Dichlorobenzene	ND	300	"							
1,3-Dichlorobenzene	ND	300	"							
2,4-Dichlorophenol	ND	1000	"							
Diethyl phthalate	ND	300	"							
2,4-Dimethylphenol	ND	1000	"							
Dimethyl phthalate	ND	300	"							
4,6-Dinitro-2-methylphenol	ND	1000	"							
2,4-Dinitrophenol	ND	1000	"							
2,6-Dinitrotoluene	ND	1000	"							
Di-n-octyl phthalate	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Hexachlorobenzene	ND	1500	"							
Hexachlorobutadiene	ND	300	"							
Hexachlorocyclopentadiene	ND	1000	"							
Hexachloroethane	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Isophorone	ND	300	"							
2-Methylphenol	ND	1000	"							
4-Methylphenol	ND	1000	"							
Naphthalene	ND	300	"							
2-Nitroaniline	ND	300	"							
3-Nitroaniline	ND	300	"							
4-Nitroaniline	ND	300	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Nitrobenzene	ND	1000	ug/kg							
2-Nitrophenol	ND	1000	"							
N-Nitrosodimethylamine	ND	300	"							
N-Nitrosodiphenylamine	ND	300	"							
2,3,5,6-Tetrachlorophenol	ND	300	"							
2,3,4,6-Tetrachlorophenol	ND	300	"							
Phenanthrene	ND	300	"							
Azobenzene	ND	300	"							
Pyridine	ND	300	"							
2,4,5-Trichlorophenol	ND	1000	"							
2,4,6-Trichlorophenol	ND	1000	"							
Surrogate: 2-Fluorophenol	*2000*		*"*	*3310*		*60.4*	*15-121*			
Surrogate: Phenol-d6	*2270*		*"*	*3310*		*68.4*	*24-113*			
Surrogate: Nitrobenzene-d5	*2030*		*"*	*3310*		*61.4*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2510*		*"*	*3310*		*75.9*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2680*		*"*	*3310*		*81.1*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3210*		*"*	*3310*		*96.9*	*29.1-130*			
LCS (8092419-BS1)				Prepared & Analyzed: 09/24/18						
Phenol	2150	1000	ug/kg	3380		63.8	34-114			
2-Chlorophenol	2270	1000	"	3380		67.2	34-114			
1,4-Dichlorobenzene	2140	300	"	3380		63.2	34-114			
N-Nitrosodi-n-propylamine	2280	300	"	3380		67.4	30-110			
1,2,4-Trichlorobenzene	2220	300	"	3380		65.6	39-119			
4-Chloro-3-methylphenol	2560	1000	"	3380		75.8	50-130			
Acenaphthene	2580	300	"	3380		76.3	34-114			
Pentachlorophenol	3490	1000	"	3380		103	50-130			
Pyrene	2760	300	"	3380		81.7	30-110			
Surrogate: 2-Fluorophenol	*2140*		*"*	*3380*		*63.3*	*15-121*			
Surrogate: Phenol-d6	*2300*		*"*	*3380*		*68.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*2200*		*"*	*3380*		*65.2*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2610*		*"*	*3380*		*77.4*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2820*		*"*	*3380*		*83.5*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3260*		*"*	*3380*		*96.6*	*29.1-130*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
LCS Dup (8092419-BSD1)				Prepared & Analyzed: 09/24/18						
Phenol	2310	1000	ug/kg	3370		68.7	34-114	7.13	42	
2-Chlorophenol	2340	1000	"	3370		69.4	34-114	2.87	40	
1,4-Dichlorobenzene	2160	300	"	3370		64.3	34-114	1.33	28	
N-Nitrosodi-n-propylamine	2320	300	"	3370		68.8	30-110	1.81	38	
1,2,4-Trichlorobenzene	2110	300	"	3370		62.6	39-119	5.02	28	
4-Chloro-3-methylphenol	2450	1000	"	3370		72.9	50-130	4.18	42	
Acenaphthene	2470	300	"	3370		73.3	34-114	4.36	31	
Pentachlorophenol	3140	1000	"	3370		93.4	50-130	10.5	50	
Pyrene	2520	300	"	3370		74.9	30-110	9.02	31	
Surrogate: 2-Fluorophenol	*2270*		*"*	*3370*		*67.4*	*15-121*			
Surrogate: Phenol-d6	*2430*		*"*	*3370*		*72.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*2120*		*"*	*3370*		*62.9*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2360*		*"*	*3370*		*70.2*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2600*		*"*	*3370*		*77.2*	*18.1-105*			
Surrogate: Terphenyl-dl4	*2880*		*"*	*3370*		*85.7*	*29.1-130*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092027 - EPA 3510C GCMS/ECD										
Blank (8092027-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	ND	1.00	ug/l							
Acenaphthylene	ND	1.00	"							
Anthracene	ND	1.00	"							
Benzo (a) anthracene	ND	1.00	"							
Benzo (b) fluoranthene	ND	1.00	"							
Benzo (k) fluoranthene	ND	1.00	"							
Benzo (g,h,i) perylene	ND	1.00	"							
Benzo (a) pyrene	ND	1.00	"							
Chrysene	ND	1.00	"							
Dibenz (a,h) anthracene	ND	1.00	"							
Fluoranthene	ND	1.00	"							
Fluorene	ND	1.00	"							
Indeno (1,2,3-cd) pyrene	ND	1.00	"							
Naphthalene	ND	1.00	"							
Phenanthrene	ND	1.00	"							
Pyrene	ND	1.00	"							
Surrogate: Terphenyl-dl4	*23.9*		*"*	*20.0*		*120*	*33-141*			
LCS (8092027-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	16.8	1.00	ug/l	20.0		84.1	50-130			
Pyrene	19.4	1.00	"	20.0		96.9	50-130			
Surrogate: Terphenyl-dl4	*23.8*		*"*	*20.0*		*119*	*33-141*			
LCS Dup (8092027-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	16.6	1.00	ug/l	20.0		83.0	50-130	1.32	31	
Pyrene	19.5	1.00	"	20.0		97.7	50-130	0.822	31	
Surrogate: Terphenyl-dl4	*22.6*		*"*	*20.0*		*113*	*33-141*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092420 - EPA 3550 ECD/GCMS										
Blank (8092420-BLK1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	ND	10	ug/kg							
Acenaphthylene	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
Benzo (g,h,i) perylene	ND	5.0	"							
Benzo (a) pyrene	ND	10	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	5.0	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Indeno (1,2,3-cd) pyrene	ND	5.0	"							
Naphthalene	ND	5.0	"							
Phenanthrene	ND	5.0	"							
Pyrene	ND	10	"							
Surrogate: Terphenyl-dl4	*357*		*"*	*329*		*109*	*18-137*			
LCS (8092420-BS1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	285	10	ug/kg	326		87.6	50-130			
Pyrene	339	10	"	326		104	50-130			
Surrogate: Terphenyl-dl4	*384*		*"*	*326*		*118*	*18-137*			
LCS Dup (8092420-BSD1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	316	10	ug/kg	338		93.5	50-130	10.2	31	
Pyrene	273	10	"	338		80.8	50-130	21.5	31	
Surrogate: Terphenyl-dl4	*364*		*"*	*338*		*108*	*18-137*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Notes and Definitions

QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-PS	The percent recovery and/or RPD are outside acceptance criteria. Results accepted based upon percent recovery results in the post spike and/or serial dilution.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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949-297-5020

Chain of Custody Record

Client: TERRA PHASE ENGINEERING INC
Address: 18409 VON KARMAN AVE IRVINE CA
Phone: 949 377 2227 Fax:
Project Manager: CLARE STEEDMAN

Date: 9/19/18 Page: 1 Of 2
Project Name: HAMILTON HIGHSCHOOL
Collector: DAN PHELPS WES SKILLINGS Client Project #: S030.008
Batch #: T182898 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270C	~~8021 BTEX~~ OCPs (8081)	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain*	6010/7000 Title 22 Metals	6020 ICP-MS Metals	Dioxins & Furans (8290)	PAHs (8270C SIM)	Pb & As (6020)	Laboratory ID #	Comments/Preservative	Total # of containers
B4-2.5	9/19/18	0745	S	5VOA 1802 (1)	X			X				X	X		X	X		01		
B4-2.5-DUP		0745			X			X				X	X		X	X		02		
B4-5.0		0747		5VOA 1802 (1)				X				X	X		X	X		03		
B63-5.0 (19)		0845		5VOA 1802	X							X	X					04		
B63-10.0 (24)		0848			X							X	X					05		
B63-15.0 (29)		0850			X							X	X					06		
B63-0.5		1225		(1) 802					X								X	07		
B63-1.5		1228							X								X	08		
B63-2.5		1230							X								X	09		
B66-0.5		1245							X								X	10		
B66-1.5		1248							X								X	11		
B66-2.5		1250							X								X	12		
~~B66~~ B71-0.5		1320							X								X	13		
B64-0.5		1330							X								X	14		
B64-1.5		1333							X								X	15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Dan Phelps	9/19/18 1540	[signature]	9-19-18 1540
[signature]	9-19-18 1856	[signature]	9-19-18 18:56

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.1

Turn around time:

Notes
* FOR TPH ANALYZE FOR TPH GRO AND TPH DRO/ORO
** PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171038

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 2 Of 2

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: 1182898 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270 C	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ~~ICP-MS Metals~~ Pb & As	OCPs (8081)	Dioxins Furans (8290)	PAHs (8270 C SIM)	Laboratory ID #	Comments/Preservative	Total # of containers
B64-2.5	9/19/18	1335	S	8 oz										X	X			16		
B73-0.5		1410												X	X			17		
B73-1.5		1413												X	X			18		
B73-2.5		1415												X	X			19		
B74-0.5		1425												X	X			20		
B74-1.5		1427												X	X			21		
B74-2.5		1430												X	X			22		
B48-0.5		1440												X	X			23		
B48-1.5		1443												X	X			24		
B48-2.5		1445												X	X			25		
B12-0.5		1455												X	X			26		
B12-1.5		1457												X	X			27		
B12-2.5		1500												X	X			28		
EB-03	9/19/18	1615	W	6 VOA 6 1L	X			X				X	X	X	X	X	X	29		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9/19/18 1540		9-19-18 1540
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9-19-18 1856		9-19-18 18:56
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.1

Turn around time: _____

Notes

* TPH - ANALYZE FOR TPH-GRO AND TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171039

SunStar Laboratories

Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182898

Client Name: TERRAPHASE

Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☐ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 9.19.18 1540

Lab Received by: SUNNY

Date/Time Lab Received: 9.19.18 1856

Total number of coolers received:

Temperature: Cooler #1	2.9	°C +/- the CF (1.2°C) =	4.1	°C corrected temperature
Temperature: Cooler #2		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature: Cooler #3		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	☒ **Yes**	☐ **No**
If NO:				
Samples received on ice?		☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?		☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☐ Yes	☒ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested ?	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BC 9.20.18

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☐ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: B4-2.5DUP 4oz JAR RECEIVED BROKEN & IN A PLASTIC BAG. ALL 6-5035 KITS HAVE TERRAPHASE COVERING THE WEIGHTS ON EACH VOA. HCL WRITTEN ON EACH VOA OF THE 5035 KITS AS WELL

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Clare Steedman [clare.steedman@terraphase.com]
Sent: Thursday, September 20, 2018 11:38 AM
To: kris@sunstarlabs.com
Subject: RE: Hamilton High School
Attachments: image003.jpg; image001.png

Hi ⁺ riŰḱ

Pƺ aŰ Ű r Űp nŰ b ƺ Ω˘ ThankŰ

Clare Steedman, P.G.
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This e-mail (including any attachments to it) is intended solely for the use of the individual(s) or entity named above. It may contain confidential or privileged information. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately and delete the original message.

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Kris Kubota
Project Manager/Regional Account Manager

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/27/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/19/18 18:56
Logged In By:	Brian Charon	Date Logged In:	09/20/18 08:06

Samples Received at:	**4.1°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	No		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:47	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:47	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:47	
8260 5035	09/27/18 15:00	5	10/03/18 07:47	
8270C	09/27/18 15:00	5	10/03/18 07:47	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:47	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-04 B63-5.0(19) [Soil] Sampled 09/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:45	
8260 5035	09/27/18 15:00	5	10/03/18 08:45	
T182898-05 B63-10.0(24) [Soil] Sampled 09/19/18 08:48 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:48	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:48	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:48	
8260 5035	09/27/18 15:00	5	10/03/18 08:48	
T182898-06 B63-15.0(29) [Soil] Sampled 09/19/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:50	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:50	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:50	
8260 5035	09/27/18 15:00	5	10/03/18 08:50	
T182898-07 B63-0.5 [Soil] Sampled 09/19/18 12:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:25	
T182898-08 B63-1.5 [Soil] Sampled 09/19/18 12:28 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:28	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:28	
T182898-09 B63-2.5 [Soil] Sampled 09/19/18 12:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:30	
T182898-10 B66-0.5 [Soil] Sampled 09/19/18 12:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:45	
T182898-11 B66-1.5 [Soil] Sampled 09/19/18 12:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:48	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:48	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-12 B66-2.5 [Soil] Sampled 09/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:50	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:50	
T182898-13 B71-0.5 [Soil] Sampled 09/19/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:20	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:20	
T182898-14 B64-0.5 [Soil] Sampled 09/19/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:30	
T182898-15 B64-1.5 [Soil] Sampled 09/19/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:33	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:33	
T182898-16 B64-2.5 [Soil] Sampled 09/19/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:35	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:35	
T182898-17 B73-0.5 [Soil] Sampled 09/19/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:10	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:10	
T182898-18 B73-1.5 [Soil] Sampled 09/19/18 14:13 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:13	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:13	
T182898-19 B73-2.5 [Soil] Sampled 09/19/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:15	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:15	
T182898-20 B74-0.5 [Soil] Sampled 09/19/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:25	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-21 B74-1.5 [Soil] Sampled 09/19/18 14:27 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:27	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:27	
T182898-22 B74-2.5 [Soil] Sampled 09/19/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:30	
T182898-23 B48-0.5 [Soil] Sampled 09/19/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:40	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:40	
T182898-24 B48-1.5 [Soil] Sampled 09/19/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:43	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:43	
T182898-25 B48-2.5 [Soil] Sampled 09/19/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:45	
T182898-26 B18-0.5 [Soil] Sampled 09/19/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:55	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:55	
T182898-27 B18-1.5 [Soil] Sampled 09/19/18 14:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:57	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:57	
T182898-28 B18-2.5 [Soil] Sampled 09/19/18 15:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 15:00	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 15:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 15:15	
6020 Metals by ICP-MS	09/27/18 15:00	5	03/18/19 15:15	As and Pb only
8015 CC (D/MO)	09/27/18 15:00	5	09/26/18 15:15	
8015 m Gas Purge	09/27/18 15:00	5	10/03/18 15:15	
8081 Pesticides	09/27/18 15:00	5	09/26/18 15:15	
8260	09/27/18 15:00	5	10/03/18 15:15	
8270C	09/27/18 15:00	5	09/26/18 15:15	
8270C PAH SIM	09/27/18 15:00	5	09/26/18 15:15	

Frontier Analytical Laboratory

T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:47	8290 Dioxins/Furans
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 15:15	8290 Dioxins/Furans

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

27 September 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 18:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B4-2.5	T182898-01	Soil	09/19/18 07:45	09/19/18 18:56
B4-2.5 DUP	T182898-02	Soil	09/19/18 07:45	09/19/18 18:56
B4-5	T182898-03	Soil	09/19/18 07:47	09/19/18 18:56
B63-5.0(19)	T182898-04	Soil	09/19/18 08:45	09/19/18 18:56
B63-10.0(24)	T182898-05	Soil	09/19/18 08:48	09/19/18 18:56
B63-15.0(29)	T182898-06	Soil	09/19/18 08:50	09/19/18 18:56
B63-0.5	T182898-07	Soil	09/19/18 12:25	09/19/18 18:56
B63-1.5	T182898-08	Soil	09/19/18 12:28	09/19/18 18:56
B63-2.5	T182898-09	Soil	09/19/18 12:30	09/19/18 18:56
B66-0.5	T182898-10	Soil	09/19/18 12:45	09/19/18 18:56
B66-1.5	T182898-11	Soil	09/19/18 12:48	09/19/18 18:56
B66-2.5	T182898-12	Soil	09/19/18 12:50	09/19/18 18:56
B71-0.5	T182898-13	Soil	09/19/18 13:20	09/19/18 18:56
B64-0.5	T182898-14	Soil	09/19/18 13:30	09/19/18 18:56
B64-1.5	T182898-15	Soil	09/19/18 13:33	09/19/18 18:56
B64-2.5	T182898-16	Soil	09/19/18 13:35	09/19/18 18:56
B73-0.5	T182898-17	Soil	09/19/18 14:10	09/19/18 18:56
B73-1.5	T182898-18	Soil	09/19/18 14:13	09/19/18 18:56
B73-2.5	T182898-19	Soil	09/19/18 14:15	09/19/18 18:56
B74-0.5	T182898-20	Soil	09/19/18 14:25	09/19/18 18:56
B74-1.5	T182898-21	Soil	09/19/18 14:27	09/19/18 18:56
B74-2.5	T182898-22	Soil	09/19/18 14:30	09/19/18 18:56
B48-0.5	T182898-23	Soil	09/19/18 14:40	09/19/18 18:56
B48-1.5	T182898-24	Soil	09/19/18 14:43	09/19/18 18:56
B48-2.5	T182898-25	Soil	09/19/18 14:45	09/19/18 18:56
B18-0.5	T182898-26	Soil	09/19/18 14:55	09/19/18 18:56

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B18-1.5	T182898-27	Soil	09/19/18 14:57	09/19/18 18:56
B18-2.5	T182898-28	Soil	09/19/18 15:00	09/19/18 18:56
EB-03	T182898-29	Water	09/19/18 15:15	09/19/18 18:56

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DETECTIONS SUMMARY

Sample ID: B4-2.5 **Laboratory ID:** T182898-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**16**	3.0	mg/kg	EPA 6010b	
Arsenic	**23**	5.0	mg/kg	EPA 6010b	
Barium	**200**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**18**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**13**	3.0	mg/kg	EPA 6010b	
Nickel	**40**	2.0	mg/kg	EPA 6010b	
Vanadium	**83**	5.0	mg/kg	EPA 6010b	
Zinc	**84**	1.0	mg/kg	EPA 6010b	

Sample ID: B4-2.5 DUP **Laboratory ID:** T182898-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**9.8**	3.0	mg/kg	EPA 6010b	
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**8.0**	3.0	mg/kg	EPA 6010b	
Nickel	**43**	2.0	mg/kg	EPA 6010b	
Vanadium	**84**	5.0	mg/kg	EPA 6010b	
Zinc	**84**	1.0	mg/kg	EPA 6010b	

Sample ID: B4-5 **Laboratory ID:** T182898-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**7.4**	3.0	mg/kg	EPA 6010b	
Arsenic	**16**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	

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Sample ID: B4-5 **Laboratory ID:** T182898-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Chromium	**39**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**34**	1.0	mg/kg	EPA 6010b	
Lead	**6.3**	3.0	mg/kg	EPA 6010b	
Nickel	**36**	2.0	mg/kg	EPA 6010b	
Vanadium	**74**	5.0	mg/kg	EPA 6010b	
Zinc	**82**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-5.0(19) **Laboratory ID:** T182898-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	5.0	mg/kg	EPA 6010b	
Barium	**73**	1.0	mg/kg	EPA 6010b	
Chromium	**38**	2.0	mg/kg	EPA 6010b	
Cobalt	**12**	2.0	mg/kg	EPA 6010b	
Copper	**30**	1.0	mg/kg	EPA 6010b	
Nickel	**24**	2.0	mg/kg	EPA 6010b	
Vanadium	**58**	5.0	mg/kg	EPA 6010b	
Zinc	**54**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-10.0(24) **Laboratory ID:** T182898-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**11**	3.0	mg/kg	EPA 6010b	
Arsenic	**12**	5.0	mg/kg	EPA 6010b	
Barium	**56**	1.0	mg/kg	EPA 6010b	
Chromium	**35**	2.0	mg/kg	EPA 6010b	
Cobalt	**10**	2.0	mg/kg	EPA 6010b	
Copper	**22**	1.0	mg/kg	EPA 6010b	
Lead	**6.3**	3.0	mg/kg	EPA 6010b	
Nickel	**22**	2.0	mg/kg	EPA 6010b	
Vanadium	**49**	5.0	mg/kg	EPA 6010b	
Zinc	**46**	1.0	mg/kg	EPA 6010b	

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Sample ID: B63-15.0(29) **Laboratory ID:** T182898-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.3**	5.0	mg/kg	EPA 6010b	
Barium	**41**	1.0	mg/kg	EPA 6010b	
Chromium	**23**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**15**	1.0	mg/kg	EPA 6010b	
Nickel	**18**	2.0	mg/kg	EPA 6010b	
Vanadium	**33**	5.0	mg/kg	EPA 6010b	
Zinc	**27**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-0.5 **Laboratory ID:** T182898-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**10**	0.25	mg/kg	6020 ICP-MS	
Lead	**3.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B63-1.5 **Laboratory ID:** T182898-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B63-2.5 **Laboratory ID:** T182898-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-0.5 **Laboratory ID:** T182898-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**25**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.5**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B66-1.5 **Laboratory ID:** T182898-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-2.5 **Laboratory ID:** T182898-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B71-0.5 **Laboratory ID:** T182898-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-0.5 **Laboratory ID:** T182898-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**21**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-1.5 **Laboratory ID:** T182898-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-2.5 **Laboratory ID:** T182898-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**3.3**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B64-2.5 **Laboratory ID:** T182898-16

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4´-DDT	**6.6**	5.0	ug/kg	EPA 8081A	

Sample ID: B73-0.5 **Laboratory ID:** T182898-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.5**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B73-1.5 **Laboratory ID:** T182898-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B73-2.5 **Laboratory ID:** T182898-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-0.5 **Laboratory ID:** T182898-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-1.5 **Laboratory ID:** T182898-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B74-2.5 **Laboratory ID:** T182898-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-0.5 **Laboratory ID:** T182898-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-1.5 **Laboratory ID:** T182898-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-2.5 **Laboratory ID:** T182898-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B18-0.5 **Laboratory ID:** T182898-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**24**	0.25	mg/kg	6020 ICP-MS	
Lead	**26**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B18-1.5 **Laboratory ID:** T182898-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.1**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B18-2.5 **Laboratory ID:** T182898-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**63**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	

Sample ID: EB-03 **Laboratory ID:** T182898-29

Analyte	Result	Reporting Limit	Units	Method	Notes
C6-C12 (GRO)	**73**	50	ug/l	EPA 8015B	
Lead	**0.038**	0.0040	ug/l	6020 ICP-MS	
Toluene	**47**	0.50	ug/l	EPA 8260B	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	340	ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*83.7 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*104 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**16**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**23**	5.0	"	"	"	"	"	"	
Barium	**200**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**18**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**13**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**40**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**83**	5.0	"	"	"	"	"	"	
Zinc	**84**	1.0	"	"	"	"	"	"	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	3.3	"	"	"	"	"	"	
Bromodichloromethane	ND	3.3	"	"	"	"	"	"	
Bromoform	ND	3.3	"	"	"	"	"	"	
Bromomethane	ND	3.3	"	"	"	"	"	"	
n-Butylbenzene	ND	3.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.3	"	"	"	"	"	"	
Chlorobenzene	ND	3.3	"	"	"	"	"	"	
Chloroethane	ND	3.3	"	"	"	"	"	"	
Chloroform	ND	3.3	"	"	"	"	"	"	
Chloromethane	ND	3.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.3	"	"	"	"	"	"	
Dibromochloromethane	ND	3.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	6.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.3	"	"	"	"	"	"	
Dibromomethane	ND	3.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.3	"	"	"	"	"	"	
Isopropylbenzene	ND	3.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.3	"	"	"	"	"	"	
Methylene chloride	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
n-Propylbenzene	ND	3.3	"	"	"	"	"	"	
Styrene	ND	3.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.3	"	"	"	"	"	"	
Tetrachloroethene	ND	3.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.3	"	"	"	"	"	"	
Trichloroethene	ND	3.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.3	"	"	"	"	"	"	
Vinyl chloride	ND	3.3	"	"	"	"	"	"	
Benzene	ND	3.3	"	"	"	"	"	"	
Toluene	ND	3.3	"	"	"	"	"	"	
Ethylbenzene	ND	3.3	"	"	"	"	"	"	
m,p-Xylene	ND	6.6	"	"	"	"	"	"	
o-Xylene	ND	3.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*103 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*129 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*66.6 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*73.1 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*68.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*77.3 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*83.5 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*104 %*	*18-137*		"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*82.3 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*100 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**9.8**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**8.0**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**43**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**84**	5.0	"	"	"	"	"	"	
Zinc	**84**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.5	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	3.5	"	"	"	"	"	"	
Bromodichloromethane	ND	3.5	"	"	"	"	"	"	
Bromoform	ND	3.5	"	"	"	"	"	"	
Bromomethane	ND	3.5	"	"	"	"	"	"	
n-Butylbenzene	ND	3.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.5	"	"	"	"	"	"	
Chlorobenzene	ND	3.5	"	"	"	"	"	"	
Chloroethane	ND	3.5	"	"	"	"	"	"	
Chloroform	ND	3.5	"	"	"	"	"	"	
Chloromethane	ND	3.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.5	"	"	"	"	"	"	
Dibromochloromethane	ND	3.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.5	"	"	"	"	"	"	
Dibromomethane	ND	3.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.5	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.5	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.5	"	"	"	"	"	"	
Isopropylbenzene	ND	3.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.5	"	"	"	"	"	"	
Methylene chloride	ND	3.5	"	"	"	"	"	"	
Naphthalene	ND	3.5	"	"	"	"	"	"	
n-Propylbenzene	ND	3.5	"	"	"	"	"	"	
Styrene	ND	3.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.5	"	"	"	"	"	"	
Tetrachloroethene	ND	3.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.5	"	"	"	"	"	"	
Trichloroethene	ND	3.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.5	"	"	"	"	"	"	
Vinyl chloride	ND	3.5	"	"	"	"	"	"	
Benzene	ND	3.5	"	"	"	"	"	"	
Toluene	ND	3.5	"	"	"	"	"	"	
Ethylbenzene	ND	3.5	"	"	"	"	"	"	
m,p-Xylene	ND	7.1	"	"	"	"	"	"	
o-Xylene	ND	3.5	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*125 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*59.9 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*65.9 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*61.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*71.0 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*78.0 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*97.0 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*107 %*		*18-137*	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	390	ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*87.4 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*108 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**7.4**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**16**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**39**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**34**	1.0	"	"	"	"	"	"	
Lead	**6.3**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**36**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**74**	5.0	"	"	"	"	"	"	
Zinc	**82**	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.3	"	"	"	"	"	"	
Bromodichloromethane	ND	5.3	"	"	"	"	"	"	
Bromoform	ND	5.3	"	"	"	"	"	"	
Bromomethane	ND	5.3	"	"	"	"	"	"	
n-Butylbenzene	ND	5.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.3	"	"	"	"	"	"	
Chlorobenzene	ND	5.3	"	"	"	"	"	"	
Chloroethane	ND	5.3	"	"	"	"	"	"	
Chloroform	ND	5.3	"	"	"	"	"	"	
Chloromethane	ND	5.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
Dibromochloromethane	ND	5.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.3	"	"	"	"	"	"	
Dibromomethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.3	"	"	"	"	"	"	
Isopropylbenzene	ND	5.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.3	"	"	"	"	"	"	
Methylene chloride	ND	5.3	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
n-Propylbenzene	ND	5.3	"	"	"	"	"	"	
Styrene	ND	5.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
Tetrachloroethene	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.3	"	"	"	"	"	"	
Trichloroethene	ND	5.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
Vinyl chloride	ND	5.3	"	"	"	"	"	"	
Benzene	ND	5.3	"	"	"	"	"	"	
Toluene	ND	5.3	"	"	"	"	"	"	
Ethylbenzene	ND	5.3	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.3	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*126 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*60.9 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*67.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*62.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*68.3 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*77.1 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*86.5 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*	*18-137*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	370	ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*131 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*107 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**18**	5.0	"	"	"	"	"	"	
Barium	**73**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**38**	2.0	"	"	"	"	"	"	
Cobalt	**12**	2.0	"	"	"	"	"	"	
Copper	**30**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**24**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**58**	5.0	"	"	"	"	"	"	
Zinc	**54**	1.0	"	"	"	"	"	"	

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B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.8	ug/kg	1	8092008	09/20/18	09/27/18	EPA 8260B/5035	
Bromochloromethane	ND	5.8	"	"	"	"	"	"	
Bromodichloromethane	ND	5.8	"	"	"	"	"	"	
Bromoform	ND	5.8	"	"	"	"	"	"	
Bromomethane	ND	5.8	"	"	"	"	"	"	
n-Butylbenzene	ND	5.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.8	"	"	"	"	"	"	
Chlorobenzene	ND	5.8	"	"	"	"	"	"	
Chloroethane	ND	5.8	"	"	"	"	"	"	
Chloroform	ND	5.8	"	"	"	"	"	"	
Chloromethane	ND	5.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
Dibromochloromethane	ND	5.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.8	"	"	"	"	"	"	
Dibromomethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.8	ug/kg	1	8092008	09/20/18	09/27/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.8	"	"	"	"	"	"	
Isopropylbenzene	ND	5.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.8	"	"	"	"	"	"	
Methylene chloride	ND	5.8	"	"	"	"	"	"	
Naphthalene	ND	5.8	"	"	"	"	"	"	
n-Propylbenzene	ND	5.8	"	"	"	"	"	"	
Styrene	ND	5.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
Tetrachloroethene	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.8	"	"	"	"	"	"	
Trichloroethene	ND	5.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
Vinyl chloride	ND	5.8	"	"	"	"	"	"	
Benzene	ND	5.8	"	"	"	"	"	"	
Toluene	ND	5.8	"	"	"	"	"	"	
Ethylbenzene	ND	5.8	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	5.8	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8092008*	*09/20/18*	*09/27/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*106 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*68.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*109 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**11**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**12**	5.0	"	"	"	"	"	"	
Barium	**56**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**35**	2.0	"	"	"	"	"	"	
Cobalt	**10**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Lead	**6.3**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**22**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**49**	5.0	"	"	"	"	"	"	
Zinc	**46**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.0	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.0	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Surrogate: Toluene-d8		*105 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*
Surrogate: 4-Bromofluorobenzene		*105 %*	*85.9-114*		*"*	*"*	*"*	*"*
Surrogate: Dibromofluoromethane		*121 %*	*77.8-142*		*"*	*"*	*"*	*"*

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	560	ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*72.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*106 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**8.3**	5.0	"	"	"	"	"	"	
Barium	**41**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**23**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**15**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**18**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**33**	5.0	"	"	"	"	"	"	
Zinc	**27**	1.0	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.4	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.4	"	"	"	"	"	"	
Bromodichloromethane	ND	5.4	"	"	"	"	"	"	
Bromoform	ND	5.4	"	"	"	"	"	"	
Bromomethane	ND	5.4	"	"	"	"	"	"	
n-Butylbenzene	ND	5.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.4	"	"	"	"	"	"	
Chlorobenzene	ND	5.4	"	"	"	"	"	"	
Chloroethane	ND	5.4	"	"	"	"	"	"	
Chloroform	ND	5.4	"	"	"	"	"	"	
Chloromethane	ND	5.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.4	"	"	"	"	"	"	
Dibromochloromethane	ND	5.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.4	"	"	"	"	"	"	
Dibromomethane	ND	5.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.4	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.4	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.4	"	"	"	"	"	"	
Isopropylbenzene	ND	5.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.4	"	"	"	"	"	"	
Methylene chloride	ND	5.4	"	"	"	"	"	"	
Naphthalene	ND	5.4	"	"	"	"	"	"	
n-Propylbenzene	ND	5.4	"	"	"	"	"	"	
Styrene	ND	5.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.4	"	"	"	"	"	"	
Tetrachloroethene	ND	5.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.4	"	"	"	"	"	"	
Trichloroethene	ND	5.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.4	"	"	"	"	"	"	
Vinyl chloride	ND	5.4	"	"	"	"	"	"	
Benzene	ND	5.4	"	"	"	"	"	"	
Toluene	ND	5.4	"	"	"	"	"	"	
Ethylbenzene	ND	5.4	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.4	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*127 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B63-0.5

T182898-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**10**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**3.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*83.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B63-1.5

T182898-08 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**23**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*85.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B63-2.5

T182898-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*84.0 %*	*35-140*		"	"	"	"	

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B66-0.5

T182898-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**25**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*87.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B66-1.5

T182898-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*78.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B66-2.5

T182898-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*91.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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B71-0.5

T182898-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*85.4 %*	*35-140*		"	"	"	"	

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B64-0.5

T182898-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**21**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*85.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B64-1.5

T182898-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B64-2.5

T182898-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**3.3**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	**6.6**	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*79.8 %*	*35-140*		"	"	"	"	

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B73-0.5

T182898-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**6.5**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*84.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B73-1.5

T182898-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*83.4 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B73-2.5

T182898-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*74.3 %*	*35-140*		"	"	"	"	

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B74-0.5

T182898-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**11**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**9.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*81.4 %*	*35-140*		"	"	"	"	

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B74-1.5

T182898-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B74-2.5

T182898-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*54.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*64.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B48-0.5

T182898-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B48-1.5

T182898-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*70.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B48-2.5

T182898-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*60.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B18-0.5

T182898-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**24**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**26**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*65.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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B18-1.5

T182898-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092104	09/21/18	09/24/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

B18-2.5

T182898-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**63**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092104	09/21/18	09/24/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.3 %*	*35-140*		"	"	"	"	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	**73**	50	ug/l	1	8092114	09/21/18	09/24/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*94.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8092417	09/24/18	09/26/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8092013	09/20/18	09/26/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	"	"	
Cadmium	ND	50	"	"	"	"	"	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	0.0020	ug/l	1	8092012	09/20/18	09/25/18	6020 ICP-MS	
Lead	**0.038**	0.0040	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8092024	09/20/18	09/24/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8092023	09/20/18	09/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*58.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*75.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8092002	09/20/18	09/21/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8092002	09/20/18	09/21/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**47**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*	*92.6-108*		"	"	"	"	

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T182898-29 (Water)

SunStar Laboratories, Inc.

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Carbazole	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
Phenol	ND	10	"	"	"	"	"	"	
Aniline	ND	10	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
Acenaphthylene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1-Methylnaphthalene	ND	10	"	"	"	"	"	"	
2-Methylnaphthalene	ND	20	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10	"	"	"	"	"	"	
Acenaphthene	ND	10	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	20	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Benzyl alcohol	ND	50	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	20	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	20	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	20	"	"	"	"	"	"	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Chrysene	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	20	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
Diethyl phthalate	ND	10	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	10	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	5.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	20	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	20	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	20	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	10	"	"	"	"	"	"	
2-Methylphenol	ND	10	"	"	"	"	"	"	
4-Methylphenol	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	20	"	"	"	"	"	"	
2-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	25	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Phenanthrene	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
2,4,5-Trichlorophenol	ND	20	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
1,4-Dinitrobenzene	ND	10	"	"	"	"	"	"	
Pyridine	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*58.2 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*52.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*76.8 %*	*14.7-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*86.1 %*	*33.3-110*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*91.0 %*	*12.9-110*		"	"	"	"	
Surrogate: Terphenyl-dl4		*93.9 %*	*15.8-136*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	1.00	ug/l	1	8092027	09/20/18	09/24/18	EPA 8270C SIM	
Acenaphthylene	ND	1.00	"	"	"	"	"	"	
Anthracene	ND	1.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	1.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	1.00	"	"	"	"	"	"	
Chrysene	ND	1.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	1.00	"	"	"	"	"	"	
Fluoranthene	ND	1.00	"	"	"	"	"	"	
Fluorene	ND	1.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	1.00	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
Phenanthrene	ND	1.00	"	"	"	"	"	"	
Pyrene	ND	1.00	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*117 %*	*33-141*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092009 - EPA 5035 GC										
Blank (8092009-BLK1)				Prepared & Analyzed: 09/20/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*104*		*"*	*100*		*104*	*65-135*			
LCS (8092009-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
C6-C12 (GRO)	8480	500	ug/kg	11000		77.1	75-125			
Surrogate: 4-Bromofluorobenzene	*106*		*"*	*100*		*106*	*65-135*			
LCS Dup (8092009-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
C6-C12 (GRO)	10100	500	ug/kg	11000		91.5	75-125	17.1	20	
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*65-135*			
Batch 8092114 - EPA 5030 GC										
Blank (8092114-BLK1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*82.0*		*"*	*100*		*82.0*	*65-135*			
LCS (8092114-BS1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	930	50	ug/l	996		93.4	75-125			
Surrogate: 4-Bromofluorobenzene	*97.0*		*"*	*100*		*97.0*	*65-135*			
LCS Dup (8092114-BSD1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	987	50	ug/l	996		99.1	75-125	5.95	20	
Surrogate: 4-Bromofluorobenzene	*90.4*		*"*	*100*		*90.4*	*65-135*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092025 - EPA 3550B GC										
Blank (8092025-BLK1)				Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*99.6*		*"*	*100*		*99.6*	*65-135*			
LCS (8092025-BS1)				Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	560	10	mg/kg	500		112	75-125			
Surrogate: p-Terphenyl	*98.8*		*"*	*100*		*98.8*	*65-135*			
Matrix Spike (8092025-MS1)		**Source: T182898-02**		Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	530	10	mg/kg	500	ND	107	75-125			
Surrogate: p-Terphenyl	*94.3*		*"*	*100*		*94.3*	*65-135*			
Matrix Spike Dup (8092025-MSD1)		**Source: T182898-02**		Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	590	10	mg/kg	490	ND	121	75-125	10.9	20	
Surrogate: p-Terphenyl	*105*		*"*	*98.0*		*107*	*65-135*			
Batch 8092417 - EPA 3510C GC										
Blank (8092417-BLK1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*3.86*		*"*	*4.00*		*96.4*	*65-135*			
LCS (8092417-BS1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	16.8	0.50	mg/l	20.0		83.8	75-125			
Surrogate: p-Terphenyl	*3.83*		*"*	*4.00*		*95.7*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092417 - EPA 3510C GC										
LCS Dup (8092417-BSD1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	17.0	0.50	mg/l	20.0		84.9	75-125	1.31	20	
Surrogate: p-Terphenyl	*3.82*		*"*	*4.00*		*95.5*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092013 - EPA 3010A										
Blank (8092013-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8092013-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	486	50	ug/l	500		97.2	75-125			
Barium	515	50	"	500		103	75-125			
Cadmium	504	50	"	500		101	75-125			
Chromium	512	50	"	500		102	75-125			
Lead	523	50	"	500		105	75-125			
Matrix Spike (8092013-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	505	50	ug/l	500	ND	101	75-125			
Barium	487	50	"	500	ND	97.3	75-125			
Cadmium	474	50	"	500	ND	94.8	75-125			
Chromium	484	50	"	500	ND	96.7	75-125			
Lead	495	50	"	500	ND	99.0	75-125			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092013 - EPA 3010A										
Matrix Spike Dup (8092013-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	491	50	ug/l	500	ND	98.1	75-125	2.92	20	
Barium	498	50	"	500	ND	99.6	75-125	2.37	20	
Cadmium	489	50	"	500	ND	97.9	75-125	3.13	20	
Chromium	495	50	"	500	ND	99.0	75-125	2.34	20	
Lead	513	50	"	500	ND	103	75-125	3.54	20	
Batch 8092421 - EPA 3050B										
Blank (8092421-BLK1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8092421-BS1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	106	5.0	mg/kg	100		106	75-125			
Barium	106	1.0	"	100		106	75-125			
Cadmium	106	2.0	"	100		106	75-125			
Chromium	106	2.0	"	100		106	75-125			
Lead	104	3.0	"	100		104	75-125			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092421 - EPA 3050B										
Matrix Spike (8092421-MS1)		**Source: T182898-01**		Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	126	5.0	mg/kg	99.0	22.8	104	75-125			
Barium	285	1.0	"	99.0	204	81.7	75-125			
Cadmium	112	2.0	"	99.0	ND	113	75-125			
Chromium	147	2.0	"	99.0	42.5	106	75-125			
Lead	107	3.0	"	99.0	13.4	94.7	75-125			
Matrix Spike Dup (8092421-MSD1)		**Source: T182898-01**		Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	128	5.0	mg/kg	98.0	22.8	107	75-125	1.57	20	
Barium	296	1.0	"	98.0	204	94.0	75-125	3.86	20	
Cadmium	110	2.0	"	98.0	ND	113	75-125	1.33	20	
Chromium	148	2.0	"	98.0	42.5	108	75-125	0.584	20	
Lead	108	3.0	"	98.0	13.4	96.3	75-125	0.632	20	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092010 - EPA 3051										
Blank (8092010-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8092010-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	24.3	0.25	mg/kg	25.0		97.2	80-120			
Lead	24.6	0.25	"	25.0		98.5	80-120			
Matrix Spike (8092010-MS1)		**Source: T182898-07**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	35.1	0.25	mg/kg	25.0	10.3	99.1	75-125			
Lead	30.6	0.25	"	25.0	3.73	107	75-125			
Matrix Spike (8092010-MS2)		**Source: T182898-08**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	58.9	0.25	mg/kg	25.0	22.6	145	75-125			QM-05
Lead	45.3	0.25	"	25.0	6.53	155	75-125			QM-05
Matrix Spike Dup (8092010-MSD1)		**Source: T182898-07**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	47.2	0.25	mg/kg	25.0	10.3	147	75-125	29.4	20	QR-04
Lead	37.0	0.25	"	25.0	3.73	133	75-125	19.1	20	QR-04
Batch 8092011 - EPA 3051										
Blank (8092011-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Antimony	ND	0.25	mg/kg							
Arsenic	ND	0.25	"							
Barium	ND	0.25	"							
Beryllium	ND	0.25	"							
Cadmium	ND	0.25	"							
Chromium	ND	0.25	"							
Cobalt	ND	0.25	"							
Copper	ND	0.25	"							
Lead	ND	0.25	"							
Mercury	ND	0.025	"							
Molybdenum	ND	0.25	"							
Nickel	ND	0.25	"							
Selenium	ND	1.2	"							
Silver	ND	0.25	"							
Thallium	ND	0.25	"							
Vanadium	ND	0.25	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092011 - EPA 3051										
Blank (8092011-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Zinc	ND	0.25	mg/kg							
Manganese	ND	0.25	"							
LCS (8092011-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	24.5	0.25	mg/kg	25.0		97.8	80-120			
Barium	24.3	0.25	"	25.0		97.3	80-120			
Cadmium	24.0	0.25	"	25.0		96.1	80-120			
Chromium	24.5	0.25	"	25.0		97.9	80-120			
Lead	24.5	0.25	"	25.0		98.1	80-120			
Duplicate (8092011-DUP1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	25.1	1.2	mg/kg		23.7			6.05	200	
Barium	118	1.2	"		111			5.97	200	
Beryllium	0.587	1.2	"		0.524			11.4	200	
Cadmium	1.08	1.2	"		1.12			3.41	200	
Chromium	31.4	1.2	"		89.7			96.3	200	
Cobalt	9.75	1.2	"		9.80			0.493	200	
Copper	26.0	1.2	"		25.6			1.55	200	
Lead	27.2	1.2	"		25.9			5.03	200	
Mercury	0.115	0.12	"		0.0521			75.1	200	
Molybdenum	2.15	1.2	"		23.4			166	200	
Nickel	24.0	1.2	"		52.8			74.9	200	
Selenium	0.527	6.2	"		0.411			24.6	200	
Silver	ND	1.2	"		ND				200	
Thallium	ND	1.2	"		ND				200	
Vanadium	51.4	1.2	"		50.3			2.14	200	
Zinc	82.3	1.2	"		90.8			9.79	200	
Manganese	ND	1.2	"		ND				200	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092011 - EPA 3051										
Matrix Spike (8092011-MS1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	41.9	0.25	mg/kg	25.0	23.7	73.0	75-125			QR-04
Barium	143	0.25	"	25.0	111	127	75-125			QM-PS
Cadmium	23.8	0.25	"	25.0	1.12	90.9	75-125			
Chromium	50.6	0.25	"	25.0	89.7	NR	75-125			QM-PS
Lead	48.5	0.25	"	25.0	25.9	90.3	75-125			
Matrix Spike Dup (8092011-MSD1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	44.9	0.25	mg/kg	25.0	23.7	85.1	75-125	6.97	20	
Barium	157	0.25	"	25.0	111	185	75-125	9.51	20	QM-PS
Cadmium	24.6	0.25	"	25.0	1.12	93.8	75-125	2.96	20	
Chromium	54.4	0.25	"	25.0	89.7	NR	75-125	7.26	20	QM-PS
Lead	45.4	0.25	"	25.0	25.9	78.2	75-125	6.43	20	
Post Spike (8092011-PS1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Barium	147		mg/kg	25.0	111	144	80-120			QM-PS
Chromium	55.0		"	25.0	89.7	NR	80-120			QM-PS
Batch 8092012 - EPA 3010A										
Blank (8092012-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	ND	0.0020	ug/l							
Lead	ND	0.0040	"							
LCS (8092012-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	51.2	0.0020	ug/l	50.0		102	80-120			
Lead	49.9	0.0040	"	50.0		99.8	80-120			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092012 - EPA 3010A										
Matrix Spike (8092012-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	48.1	0.0020	ug/l	50.0	ND	96.2	75-125			
Lead	47.6	0.0040	"	50.0	0.0380	95.1	75-125			
Matrix Spike Dup (8092012-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	51.0	0.0020	ug/l	50.0	ND	102	75-125	5.84	20	
Lead	50.0	0.0040	"	50.0	0.0380	100	75-125	5.04	20	

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Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092020 - EPA 7471A Soil										
Blank (8092020-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	ND	0.10	mg/kg							
LCS (8092020-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.355	0.10	mg/kg	0.410		86.7	80-120			
Matrix Spike (8092020-MS1)		**Source: T182898-01**		Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.358	0.10	mg/kg	0.397	ND	90.1	75-125			
Matrix Spike Dup (8092020-MSD1)		**Source: T182898-01**		Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.356	0.10	mg/kg	0.403	ND	88.3	75-125	0.508	20	
Batch 8092024 - EPA 7470A Water										
Blank (8092024-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	ND	0.50	ug/l							
LCS (8092024-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	4.11	0.50	ug/l	5.00		82.1	80-120			
Matrix Spike (8092024-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	3.98	0.50	ug/l	5.00	ND	79.5	75-125			
Matrix Spike Dup (8092024-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	4.01	0.50	ug/l	5.00	ND	80.2	75-125	0.890	20	

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Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092014 - EPA 3550 ECD/GCMS										
Blank (8092014-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.06*		*"*	*9.80*		*72.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.03*		*"*	*9.80*		*81.9*	*35-140*			
LCS (8092014-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
gamma-BHC (Lindane)	29.8	5.0	ug/kg	39.2		76.1	40-120			
Heptachlor	28.9	5.0	"	39.2		73.8	40-120			
Aldrin	32.2	5.0	"	39.2		82.1	40-120			
Dieldrin	32.1	5.0	"	39.2		81.8	40-120			
Endrin	25.1	5.0	"	39.2		64.0	40-120			
4,4´-DDT	19.9	5.0	"	39.2		50.7	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.33*		*"*	*9.80*		*74.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.43*		*"*	*9.80*		*86.0*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092014 - EPA 3550 ECD/GCMS										
LCS Dup (8092014-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
gamma-BHC (Lindane)	31.1	5.0	ug/kg	39.2		79.3	40-120	4.13	30	
Heptachlor	30.3	5.0	"	39.2		77.3	40-120	4.64	30	
Aldrin	33.0	5.0	"	39.2		84.1	40-120	2.41	30	
Dieldrin	33.4	5.0	"	39.2		85.2	40-120	4.07	30	
Endrin	26.1	5.0	"	39.2		66.5	40-120	3.89	30	
4,4´-DDT	21.3	5.0	"	39.2		54.4	33-147	7.17	30	
Surrogate: Tetrachloro-meta-xylene	*7.22*		*"*	*9.80*		*73.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.52*		*"*	*9.80*		*87.0*	*35-140*			
Batch 8092023 - EPA 3510C GCMS/ECD										
Blank (8092023-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*64.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.816*		*"*	*1.00*		*81.6*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092023 - EPA 3510C GCMS/ECD										
LCS (8092023-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.30	1.00	ug/l	4.00		57.4	40-120			
Heptachlor	2.42	1.00	"	4.00		60.6	40-120			
Aldrin	2.04	1.00	"	4.00		51.0	40-120			
Dieldrin	2.58	1.00	"	4.00		64.5	40-120			
Endrin	2.58	1.00	"	4.00		64.6	40-120			
4,4´-DDT	2.41	2.00	"	4.00		60.4	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.508*		*"*	*1.00*		*50.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.684*		*"*	*1.00*		*68.4*	*35-140*			
Matrix Spike (8092023-MS1)		**Source: T182893-01**		Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.46	1.00	ug/l	4.00	ND	61.5	20-120			
Heptachlor	2.65	1.00	"	4.00	ND	66.2	20-120			
Aldrin	2.35	1.00	"	4.00	ND	58.7	20-120			
Dieldrin	2.69	1.00	"	4.00	ND	67.3	20-120			
Endrin	2.69	1.00	"	4.00	ND	67.2	20-120			
4,4´-DDT	2.57	2.00	"	4.00	ND	64.3	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.576*		*"*	*1.00*		*57.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.734*		*"*	*1.00*		*73.4*	*35-140*			
Matrix Spike Dup (8092023-MSD1)		**Source: T182893-01**		Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.48	1.00	ug/l	4.00	ND	62.0	20-120	0.774	30	
Heptachlor	2.61	1.00	"	4.00	ND	65.3	20-120	1.31	30	
Aldrin	2.31	1.00	"	4.00	ND	57.7	20-120	1.69	30	
Dieldrin	2.72	1.00	"	4.00	ND	68.1	20-120	1.15	30	
Endrin	2.74	1.00	"	4.00	ND	68.6	20-120	2.06	30	
4,4´-DDT	2.62	2.00	"	4.00	ND	65.6	20-120	2.02	30	
Surrogate: Tetrachloro-meta-xylene	*0.517*		*"*	*1.00*		*51.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.682*		*"*	*1.00*		*68.2*	*35-140*			

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Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092104 - EPA 3550 ECD/GCMS										
Blank (8092104-BLK1)				Prepared: 09/21/18 Analyzed: 09/24/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.32*		*"*	*10.0*		*73.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.41*		*"*	*10.0*		*74.1*	*35-140*			
LCS (8092104-BS1)				Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	31.2	5.0	ug/kg	40.0		78.0	40-120			
Heptachlor	31.2	5.0	"	40.0		78.1	40-120			
Aldrin	30.3	5.0	"	40.0		75.7	40-120			
Dieldrin	30.8	5.0	"	40.0		77.0	40-120			
Endrin	30.5	5.0	"	40.0		76.3	40-120			
4,4´-DDT	21.0	5.0	"	40.0		52.5	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.38*		*"*	*10.0*		*73.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.75*		*"*	*10.0*		*77.5*	*35-140*			

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Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092104 - EPA 3550 ECD/GCMS										
Matrix Spike (8092104-MS1)		**Source: T182894-05**		Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	30.6	5.0	ug/kg	40.4	ND	75.8	30-120			
Heptachlor	31.7	5.0	"	40.4	ND	78.4	30-120			
Aldrin	30.7	5.0	"	40.4	ND	75.9	30-120			
Dieldrin	26.7	5.0	"	40.4	ND	66.1	30-120			
Endrin	26.2	5.0	"	40.4	ND	64.8	30-120			
4,4´-DDT	37.9	5.0	"	40.4	6.38	78.0	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.51*		*"*	*10.1*		*74.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.08*		*"*	*10.1*		*80.0*	*35-140*			
Matrix Spike Dup (8092104-MSD1)		**Source: T182894-05**		Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	27.4	5.0	ug/kg	40.0	ND	68.5	30-120	10.1	30	
Heptachlor	28.3	5.0	"	40.0	ND	70.8	30-120	10.2	30	
Aldrin	27.8	5.0	"	40.0	ND	69.5	30-120	8.85	30	
Dieldrin	22.8	5.0	"	40.0	ND	57.0	30-120	14.9	30	
Endrin	22.4	5.0	"	40.0	ND	56.0	30-120	14.5	30	
4,4´-DDT	33.5	5.0	"	40.0	6.38	67.8	30-120	13.9	30	
Surrogate: Tetrachloro-meta-xylene	*6.79*		*"*	*10.0*		*67.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.14*		*"*	*10.0*		*71.4*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
Blank (8092002-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
Blank (8092002-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.2*		*"*	*20.0*		*96.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.1*		*"*	*20.0*		*100*	*71.5-128*			
Surrogate: Toluene-d8	*19.9*		*"*	*20.0*		*99.3*	*92.6-108*			
LCS (8092002-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Chlorobenzene	17.1	1.0	ug/l	20.0		85.6	79.3-117			
1,1-Dichloroethene	15.2	1.0	"	20.0		76.0	68.3-130			
Trichloroethene	16.6	1.0	"	20.0		82.8	82.4-119			
Benzene	17.3	0.50	"	20.0		86.5	79.9-118			
Toluene	16.8	0.50	"	20.0		84.0	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.4*		*"*	*20.0*		*97.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.5*		*"*	*20.0*		*103*	*71.5-128*			
Surrogate: Toluene-d8	*20.4*		*"*	*20.0*		*102*	*92.6-108*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
LCS Dup (8092002-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Chlorobenzene	18.8	1.0	ug/l	20.0		94.2	79.3-117	9.62	20	
1,1-Dichloroethene	17.2	1.0	"	20.0		85.9	68.3-130	12.2	20	
Trichloroethene	17.8	1.0	"	20.0		89.0	82.4-119	7.22	20	
Benzene	18.9	0.50	"	20.0		94.6	79.9-118	9.00	20	
Toluene	18.5	0.50	"	20.0		92.4	78.7-116	9.47	20	
Surrogate: 4-Bromofluorobenzene	*19.6*		*"*	*20.0*		*98.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.8*		*"*	*20.0*		*104*	*71.5-128*			
Surrogate: Toluene-d8	*20.1*		*"*	*20.0*		*100*	*92.6-108*			
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	9.9	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	9.9	"							
o-Xylene	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Surrogate: Toluene-d8	*41.4*		*ug/kg*	*39.7*		*104*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.8*		*"*	*39.7*		*103*	*85.9-114*			
Surrogate: Dibromofluoromethane	*48.1*		*"*	*39.7*		*121*	*77.8-142*			
LCS (8092008-BS1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Chlorobenzene	30.5	5.0	ug/kg	39.7		77.0	75-125			
1,1-Dichloroethene	34.5	5.0	"	39.7		86.9	75-125			
Trichloroethene	30.9	5.0	"	39.7		78.0	75-125			
Benzene	37.2	5.0	"	39.7		93.8	75-125			
Toluene	33.0	5.0	"	39.7		83.0	75-125			
Surrogate: Toluene-d8	*38.8*		*"*	*39.7*		*97.9*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*37.8*		*"*	*39.7*		*95.2*	*85.9-114*			
Surrogate: Dibromofluoromethane	*50.8*		*"*	*39.7*		*128*	*77.8-142*			
LCS Dup (8092008-BSD1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Chlorobenzene	32.0	5.0	ug/kg	39.7		80.6	75-125	4.63	20	
1,1-Dichloroethene	35.4	5.0	"	39.7		89.3	75-125	2.73	20	
Trichloroethene	30.4	5.0	"	39.7		76.5	75-125	1.88	20	
Benzene	35.9	5.0	"	39.7		90.6	75-125	3.58	20	
Toluene	30.6	5.0	"	39.7		77.2	75-125	7.37	20	
Surrogate: Toluene-d8	*38.8*		*"*	*39.7*		*97.7*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*41.7*		*"*	*39.7*		*105*	*85.9-114*			
Surrogate: Dibromofluoromethane	*53.3*		*"*	*39.7*		*134*	*77.8-142*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Carbazole	ND	10	ug/l							
Aniline	ND	10	"							
Phenol	ND	10	"							
Acenaphthylene	ND	10	"							
2-Chlorophenol	ND	10	"							
1,4-Dichlorobenzene	ND	10	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Anthracene	ND	10	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	10	"							
2-Methylnaphthalene	ND	20	"							
1-Methylnaphthalene	ND	10	"							
Benzo (a) anthracene	ND	10	"							
Acenaphthene	ND	10	"							
4-Nitrophenol	ND	10	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
2,4-Dinitrotoluene	ND	10	"							
Pentachlorophenol	ND	10	"							
Benzo (g,h,i) perylene	ND	20	"							
Pyrene	ND	10	"							
Benzo (a) pyrene	ND	10	"							
Benzyl alcohol	ND	50	"							
Bis(2-chloroethoxy)methane	ND	10	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	20	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	10	"							
4-Chloroaniline	ND	20	"							
2-Chloronaphthalene	ND	10	"							
4-Chlorophenyl phenyl ether	ND	20	"							
Chrysene	ND	10	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	20	"							
Di-n-butyl phthalate	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
1,2-Dichlorobenzene	ND	5.0	ug/l							
1,3-Dichlorobenzene	ND	5.0	"							
2,4-Dichlorophenol	ND	10	"							
Diethyl phthalate	ND	10	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	10	"							
4,6-Dinitro-2-methylphenol	ND	5.0	"							
2,4-Dinitrophenol	ND	10	"							
2,6-Dinitrotoluene	ND	20	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Hexachlorobenzene	ND	20	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	20	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	10	"							
2-Methylphenol	ND	10	"							
4-Methylphenol	ND	20	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	20	"							
2-Nitrophenol	ND	10	"							
N-Nitrosodiphenylamine	ND	10	"							
N-Nitrosodimethylamine	ND	25	"							
Phenanthrene	ND	10	"							
2,4,5-Trichlorophenol	ND	20	"							
2,4,6-Trichlorophenol	ND	10	"							
2,3,4,6-Tetrachlorophenol	ND	10	"							
2,3,5,6-Tetrachlorophenol	ND	10	"							
1,4-Dinitrobenzene	ND	10	"							
Pyridine	ND	10	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Surrogate: 2-Fluorophenol	*88.9*		*ug/l*	*200*		*44.5*	*15-121*			
Surrogate: Phenol-d6	*80.4*		*"*	*200*		*40.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*123*		*"*	*200*		*61.7*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*147*		*"*	*200*		*73.6*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*159*		*"*	*200*		*79.6*	*12.9-110*			
Surrogate: Terphenyl-dl4	*168*		*"*	*200*		*84.2*	*15.8-136*			
LCS (8092026-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Phenol	76.9	10	ug/l	200		38.4	12-89			
2-Chlorophenol	119	10	"	200		59.3	40-120			
1,4-Dichlorobenzene	105	10	"	200		52.7	33-94			
N-Nitrosodi-n-propylamine	128	5.0	"	200		64.0	40-120			
1,2,4-Trichlorobenzene	126	5.0	"	200		63.1	40-120			
4-Chloro-3-methylphenol	134	10	"	200		67.1	50-130			
Acenaphthene	148	10	"	200		74.0	50-130			
4-Nitrophenol	107	10	"	200		53.6	10-80			
2,4-Dinitrotoluene	146	10	"	200		73.0	24-96			
Pentachlorophenol	188	10	"	200		94.1	50-130			
Pyrene	162	10	"	200		80.9	26-127			
Surrogate: 2-Fluorophenol	*88.8*		*"*	*200*		*44.4*	*15-121*			
Surrogate: Phenol-d6	*81.0*		*"*	*200*		*40.5*	*24-113*			
Surrogate: Nitrobenzene-d5	*130*		*"*	*200*		*65.1*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*157*		*"*	*200*		*78.5*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*170*		*"*	*200*		*84.9*	*12.9-110*			
Surrogate: Terphenyl-dl4	*183*		*"*	*200*		*91.4*	*15.8-136*			
LCS Dup (8092026-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Phenol	95.3	10	ug/l	200		47.6	12-89	21.3	42	
2-Chlorophenol	136	10	"	200		68.0	40-120	13.8	40	
1,4-Dichlorobenzene	124	10	"	200		61.8	33-94	16.0	28	
N-Nitrosodi-n-propylamine	148	5.0	"	200		74.2	40-120	14.8	38	
1,2,4-Trichlorobenzene	134	5.0	"	200		66.9	40-120	5.85	28	
4-Chloro-3-methylphenol	148	10	"	200		74.1	50-130	10.0	42	
Acenaphthene	161	10	"	200		80.5	50-130	8.40	31	
4-Nitrophenol	106	10	"	200		52.8	10-80	1.60	50	
2,4-Dinitrotoluene	158	10	"	200		79.0	24-96	7.90	38	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
LCS Dup (8092026-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Pentachlorophenol	217	10	ug/l	200		108	50-130	14.1	50	
Pyrene	172	10	"	200		86.1	26-127	6.28	31	
Surrogate: 2-Fluorophenol	*103*		*"*	*200*		*51.6*	*15-121*			
Surrogate: Phenol-d6	*98.1*		*"*	*200*		*49.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*142*		*"*	*200*		*70.9*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*169*		*"*	*200*		*84.4*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*184*		*"*	*200*		*91.8*	*12.9-110*			
Surrogate: Terphenyl-dl4	*189*		*"*	*200*		*94.5*	*15.8-136*			
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Carbazole	ND	300	ug/kg							
Phenol	ND	1000	"							
Aniline	ND	300	"							
2-Chlorophenol	ND	1000	"							
1,4-Dichlorobenzene	ND	300	"							
N-Nitrosodi-n-propylamine	ND	300	"							
1,2,4-Trichlorobenzene	ND	300	"							
4-Chloro-3-methylphenol	ND	1000	"							
2-Methylnaphthalene	ND	300	"							
1-Methylnaphthalene	ND	300	"							
Acenaphthene	ND	300	"							
4-Nitrophenol	ND	1000	"							
2,4-Dinitrotoluene	ND	300	"							
Pentachlorophenol	ND	1000	"							
Pyrene	ND	300	"							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Benzyl alcohol	ND	300	"							
Bis(2-chloroethoxy)methane	ND	300	"							

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Kris Kubota, Project Manager Assistant

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Providing Quality Analytical Services Nationwide

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949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Bis(2-chloroethyl)ether	ND	300	ug/kg							
Bis(2-chloroisopropyl)ether	ND	300	"							
Bis(2-ethylhexyl)phthalate	ND	300	"							
4-Bromophenyl phenyl ether	ND	300	"							
Butyl benzyl phthalate	ND	300	"							
4-Chloroaniline	ND	300	"							
2-Chloronaphthalene	ND	300	"							
4-Chlorophenyl phenyl ether	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Dibenzofuran	ND	300	"							
Di-n-butyl phthalate	ND	300	"							
1,2-Dichlorobenzene	ND	300	"							
1,3-Dichlorobenzene	ND	300	"							
2,4-Dichlorophenol	ND	1000	"							
Diethyl phthalate	ND	300	"							
2,4-Dimethylphenol	ND	1000	"							
Dimethyl phthalate	ND	300	"							
4,6-Dinitro-2-methylphenol	ND	1000	"							
2,4-Dinitrophenol	ND	1000	"							
2,6-Dinitrotoluene	ND	1000	"							
Di-n-octyl phthalate	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Hexachlorobenzene	ND	1500	"							
Hexachlorobutadiene	ND	300	"							
Hexachlorocyclopentadiene	ND	1000	"							
Hexachloroethane	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Isophorone	ND	300	"							
2-Methylphenol	ND	1000	"							
4-Methylphenol	ND	1000	"							
Naphthalene	ND	300	"							
2-Nitroaniline	ND	300	"							
3-Nitroaniline	ND	300	"							
4-Nitroaniline	ND	300	"							

SunStar Laboratories, Inc.

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Kris Kubota, Project Manager Assistant

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Nitrobenzene	ND	1000	ug/kg							
2-Nitrophenol	ND	1000	"							
N-Nitrosodimethylamine	ND	300	"							
N-Nitrosodiphenylamine	ND	300	"							
2,3,5,6-Tetrachlorophenol	ND	300	"							
2,3,4,6-Tetrachlorophenol	ND	300	"							
Phenanthrene	ND	300	"							
Azobenzene	ND	300	"							
Pyridine	ND	300	"							
2,4,5-Trichlorophenol	ND	1000	"							
2,4,6-Trichlorophenol	ND	1000	"							
Surrogate: 2-Fluorophenol	*2000*		*"*	*3310*		*60.4*	*15-121*			
Surrogate: Phenol-d6	*2270*		*"*	*3310*		*68.4*	*24-113*			
Surrogate: Nitrobenzene-d5	*2030*		*"*	*3310*		*61.4*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2510*		*"*	*3310*		*75.9*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2680*		*"*	*3310*		*81.1*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3210*		*"*	*3310*		*96.9*	*29.1-130*			
LCS (8092419-BS1)				Prepared & Analyzed: 09/24/18						
Phenol	2150	1000	ug/kg	3380		63.8	34-114			
2-Chlorophenol	2270	1000	"	3380		67.2	34-114			
1,4-Dichlorobenzene	2140	300	"	3380		63.2	34-114			
N-Nitrosodi-n-propylamine	2280	300	"	3380		67.4	30-110			
1,2,4-Trichlorobenzene	2220	300	"	3380		65.6	39-119			
4-Chloro-3-methylphenol	2560	1000	"	3380		75.8	50-130			
Acenaphthene	2580	300	"	3380		76.3	34-114			
Pentachlorophenol	3490	1000	"	3380		103	50-130			
Pyrene	2760	300	"	3380		81.7	30-110			
Surrogate: 2-Fluorophenol	*2140*		*"*	*3380*		*63.3*	*15-121*			
Surrogate: Phenol-d6	*2300*		*"*	*3380*		*68.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*2200*		*"*	*3380*		*65.2*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2610*		*"*	*3380*		*77.4*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2820*		*"*	*3380*		*83.5*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3260*		*"*	*3380*		*96.6*	*29.1-130*			

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
LCS Dup (8092419-BSD1)				Prepared & Analyzed: 09/24/18						
Phenol	2310	1000	ug/kg	3370		68.7	34-114	7.13	42	
2-Chlorophenol	2340	1000	"	3370		69.4	34-114	2.87	40	
1,4-Dichlorobenzene	2160	300	"	3370		64.3	34-114	1.33	28	
N-Nitrosodi-n-propylamine	2320	300	"	3370		68.8	30-110	1.81	38	
1,2,4-Trichlorobenzene	2110	300	"	3370		62.6	39-119	5.02	28	
4-Chloro-3-methylphenol	2450	1000	"	3370		72.9	50-130	4.18	42	
Acenaphthene	2470	300	"	3370		73.3	34-114	4.36	31	
Pentachlorophenol	3140	1000	"	3370		93.4	50-130	10.5	50	
Pyrene	2520	300	"	3370		74.9	30-110	9.02	31	
Surrogate: 2-Fluorophenol	*2270*		*"*	*3370*		*67.4*	*15-121*			
Surrogate: Phenol-d6	*2430*		*"*	*3370*		*72.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*2120*		*"*	*3370*		*62.9*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2360*		*"*	*3370*		*70.2*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2600*		*"*	*3370*		*77.2*	*18.1-105*			
Surrogate: Terphenyl-dl4	*2880*		*"*	*3370*		*85.7*	*29.1-130*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092027 - EPA 3510C GCMS/ECD										
Blank (8092027-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	ND	1.00	ug/l							
Acenaphthylene	ND	1.00	"							
Anthracene	ND	1.00	"							
Benzo (a) anthracene	ND	1.00	"							
Benzo (b) fluoranthene	ND	1.00	"							
Benzo (k) fluoranthene	ND	1.00	"							
Benzo (g,h,i) perylene	ND	1.00	"							
Benzo (a) pyrene	ND	1.00	"							
Chrysene	ND	1.00	"							
Dibenz (a,h) anthracene	ND	1.00	"							
Fluoranthene	ND	1.00	"							
Fluorene	ND	1.00	"							
Indeno (1,2,3-cd) pyrene	ND	1.00	"							
Naphthalene	ND	1.00	"							
Phenanthrene	ND	1.00	"							
Pyrene	ND	1.00	"							
Surrogate: Terphenyl-dl4	*23.9*		*"*	*20.0*		*120*	*33-141*			
LCS (8092027-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	16.8	1.00	ug/l	20.0		84.1	50-130			
Pyrene	19.4	1.00	"	20.0		96.9	50-130			
Surrogate: Terphenyl-dl4	*23.8*		*"*	*20.0*		*119*	*33-141*			
LCS Dup (8092027-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	16.6	1.00	ug/l	20.0		83.0	50-130	1.32	31	
Pyrene	19.5	1.00	"	20.0		97.7	50-130	0.822	31	
Surrogate: Terphenyl-dl4	*22.6*		*"*	*20.0*		*113*	*33-141*			

SunStar Laboratories, Inc.

Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092420 - EPA 3550 ECD/GCMS										
Blank (8092420-BLK1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	ND	10	ug/kg							
Acenaphthylene	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
Benzo (g,h,i) perylene	ND	5.0	"							
Benzo (a) pyrene	ND	10	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	5.0	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Indeno (1,2,3-cd) pyrene	ND	5.0	"							
Naphthalene	ND	5.0	"							
Phenanthrene	ND	5.0	"							
Pyrene	ND	10	"							
Surrogate: Terphenyl-dl4	*357*		*"*	*329*		*109*	*18-137*			
LCS (8092420-BS1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	285	10	ug/kg	326		87.6	50-130			
Pyrene	339	10	"	326		104	50-130			
Surrogate: Terphenyl-dl4	*384*		*"*	*326*		*118*	*18-137*			
LCS Dup (8092420-BSD1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	316	10	ug/kg	338		93.5	50-130	10.2	31	
Pyrene	273	10	"	338		80.8	50-130	21.5	31	
Surrogate: Terphenyl-dl4	*364*		*"*	*338*		*108*	*18-137*			

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	09/27/18 14:32

Notes and Definitions

QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-PS	The percent recovery and/or RPD are outside acceptance criteria. Results accepted based upon percent recovery results in the post spike and/or serial dilution.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

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Kris Kubota, Project Manager Assistant

October 8, 2018

FAL Project ID: 11895

Mr. Kris Kubota
SunStar Laboratories, Inc.
25712 Commercentre Drive
Lake Forest, CA 92630

Dear Mr. Kubota,

The following results are associated with Frontier Analytical Laboratory project **11895**. This corresponds to your subcontract order **T182898**. Three soil samples and one aqueous sample were received at Frontier Analytical Laboratory on 9/21/2018. These samples were extracted and analyzed by EPA Method 8290 for tetra through octa chlorinated dibenzo dioxins and furans. The 2005 World Health Organizations (WHO) toxic equivalency factors (TEFs) were used to calculate the toxic equivalents (TEQs) on your report. SunStar Laboratories, Inc. requested a turnaround time of fifteen days for project **11895**.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains our sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and a sample photo. The attached results are specifically for the samples referenced in this report only. These results meet all National Environmental Laboratory Accreditation Program (NELAP) requirements and shall not be reproduced except in full. Frontier Analytical Laboratory's State of Oregon NELAP certificate number is **4041**. Our State of California ELAP certificate number is **2934**. This report has been emailed to you as a portable document format (PDF) file. A hardcopy will not be sent to you unless specifically requested.

If you have any questions regarding project **11895** please feel free to contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **11895**

Received on: **09/21/2018** Project Due: **10/15/2018** Storage: **R-3**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
11895-001-SA	0	T182898	T182898-01	EPA 8290 D/F	Soil	09/19/2018	07:45 am	10/19/2018
11895-002-SA	0	T182898	T182898-02	EPA 8290 D/F	Soil	09/19/2018	07:45 am	10/19/2018
11895-003-SA	0	T182898	T182898-03	EPA 8290 D/F	Soil	09/19/2018	07:47 am	10/19/2018
11895-004-SA	1	T182898	T182898-29	EPA 8290 D/F	Aqueous	09/19/2018	03:15 pm	10/19/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-001-MB	Date Extracted: 10-02-2018	ICal: PCDDFAL4-6-9-18	Acquired: 10-04-2018
Client ID: Method Blank	Date Received: NA	GC Column: DB5MS	2005 WHO TEQ: 0.0
Matrix: Soil	Amount: 5.00 g	Units: pg/g	Basis: Dry Weight
Batch No: X4664			

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.0952		-	0.0273				
1,2,3,7,8-PeCDD	ND	0.189		-	0.0570				
1,2,3,4,7,8-HxCDD	ND	0.193		-	0.0793				
1,2,3,6,7,8-HxCDD	ND	0.202		-	0.0940	Total TCDD	ND	0.0952	
1,2,3,7,8,9-HxCDD	ND	0.181		-	0.0823	Total PeCDD	ND	0.189	
1,2,3,4,6,7,8-HpCDD	ND	0.298		-	0.0842	Total HxCDD	ND	0.202	
OCDD	ND	0.598		-	0.172	Total HpCDD	ND	0.298	
2,3,7,8-TCDF	ND	0.0759		-	0.0269				
1,2,3,7,8-PeCDF	ND	0.132		-	0.0449				
2,3,4,7,8-PeCDF	ND	0.153		-	0.0468				
1,2,3,4,7,8-HxCDF	ND	0.120		-	0.0437				
1,2,3,6,7,8-HxCDF	ND	0.144		-	0.0417				
2,3,4,6,7,8-HxCDF	ND	0.148		-	0.0574				
1,2,3,7,8,9-HxCDF	ND	0.170		-	0.0657	Total TCDF	ND	0.0759	
1,2,3,4,6,7,8-HpCDF	ND	0.147		-	0.0747	Total PeCDF	ND	0.153	
1,2,3,4,7,8,9-HpCDF	ND	0.159		-	0.0883	Total HxCDF	ND	0.170	
OCDF	ND	0.527		-	0.170	Total HpCDF	ND	0.159	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	89.5	40.0 - 135	
13C-1,2,3,7,8-PeCDD	86.7	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	93.1	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	94.2	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	91.7	40.0 - 135	
13C-OCDD	84.9	40.0 - 135	
13C-2,3,7,8-TCDF	93.4	40.0 - 135	
13C-1,2,3,7,8-PeCDF	84.9	40.0 - 135	
13C-2,3,4,7,8-PeCDF	82.3	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	98.8	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	91.6	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	90.2	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	88.5	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	89.9	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	90.0	40.0 - 135	
13C-OCDF	80.9	40.0 - 135	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	86.6	50.0 - 150

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/4/2018

Reviewed By: DPV

Date: 10/5/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-001-OPR
Client ID: OPR
Matrix: Soil
Batch No: X4664

Date Extracted: 10-02-2018
Date Received: NA
Amount: 5.00 g

ICal: PCDDFAL4-6-9-18
GC Column: DB5MS
Units: ng/ml

Acquired: 10-04-2018
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.38	7.00 - 13.0	
1,2,3,7,8-PeCDD	40.7	35.0 - 65.0	
1,2,3,4,7,8-HxCDD	46.7	35.0 - 65.0	
1,2,3,6,7,8-HxCDD	46.2	35.0 - 65.0	
1,2,3,7,8,9-HxCDD	45.5	35.0 - 65.0	
1,2,3,4,6,7,8-HpCDD	46.7	35.0 - 65.0	
OCDD	91.6	70.0 - 130	
2,3,7,8-TCDF	9.39	7.00 - 13.0	
1,2,3,7,8-PeCDF	50.4	35.0 - 65.0	
2,3,4,7,8-PeCDF	49.4	35.0 - 65.0	
1,2,3,4,7,8-HxCDF	48.1	35.0 - 65.0	
1,2,3,6,7,8-HxCDF	48.5	35.0 - 65.0	
2,3,4,6,7,8-HxCDF	48.5	35.0 - 65.0	
1,2,3,7,8,9-HxCDF	48.8	35.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	48.6	35.0 - 65.0	
1,2,3,4,7,8,9-HpCDF	48.2	35.0 - 65.0	
OCDF	101	70.0 - 130	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	95.7	40.0 - 135	
13C-1,2,3,7,8-PeCDD	90.8	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	97.5	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	99.3	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	94.9	40.0 - 135	
13C-OCDD	88.6	40.0 - 135	
13C-2,3,7,8-TCDF	99.2	40.0 - 135	
13C-1,2,3,7,8-PeCDF	85.1	40.0 - 135	
13C-2,3,4,7,8-PeCDF	88.6	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	98.4	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	95.9	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	94.3	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	92.6	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	92.5	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	95.3	40.0 - 135	
13C-OCDF	86.7	40.0 - 135	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	89.7	50.0 - 150

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: [signature]

Date: 10/4/2018

Reviewed By: DPV

Date: 10/5/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-001-SA	Date Extracted: 10-02-2018	ICal: PCDDFAL4-6-9-18	Acquired: 10-04-2018
Client ID: T182898-01	Date Received: 09-21-2018	GC Column: DB5MS	2005 WHO TEQ: 0.0474
Matrix: Soil	Amount: 5.01 g	Units: pg/g	Basis: Dry Weight
Batch No: X4664	% Solids: 85.02		

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.0544		-	0.0273				
1,2,3,7,8-PeCDD	ND	0.0920		-	0.0570				
1,2,3,4,7,8-HxCDD	ND	0.194		-	0.0793				
1,2,3,6,7,8-HxCDD	ND	0.195		-	0.0940	Total TCDD	ND	0.0544	
1,2,3,7,8,9-HxCDD	ND	0.179		-	0.0823	Total PeCDD	ND	0.0920	
1,2,3,4,6,7,8-HpCDD	ND	0.385		-	0.0842	Total HxCDD	ND	0.195	
OCDD	ND	0.492		-	0.172	Total HpCDD	ND	0.385	
2,3,7,8-TCDF	ND	0.0422		-	0.0269				
1,2,3,7,8-PeCDF	ND	0.104		-	0.0449				
2,3,4,7,8-PeCDF	ND	0.112		-	0.0468				
1,2,3,4,7,8-HxCDF	ND	0.147		-	0.0437				
1,2,3,6,7,8-HxCDF	ND	0.149		-	0.0417				
2,3,4,6,7,8-HxCDF	ND	0.174		-	0.0574				
1,2,3,7,8,9-HxCDF	0.474	-	J	0.0474	0.0657	Total TCDF	0.333	-	J
1,2,3,4,6,7,8-HpCDF	ND	0.136		-	0.0747	Total PeCDF	1.22	-	J
1,2,3,4,7,8,9-HpCDF	ND	0.141		-	0.0883	Total HxCDF	0.474	-	J
OCDF	ND	0.367		-	0.170	Total HpCDF	ND	0.141	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.1	40.0 - 135	
13C-1,2,3,7,8-PeCDD	85.7	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	92.2	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	89.7	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	79.5	40.0 - 135	
13C-OCDD	73.3	40.0 - 135	
13C-2,3,7,8-TCDF	91.0	40.0 - 135	
13C-1,2,3,7,8-PeCDF	84.3	40.0 - 135	
13C-2,3,4,7,8-PeCDF	85.1	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	99.1	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	91.4	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	87.8	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	84.2	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	80.9	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	78.2	40.0 - 135	
13C-OCDF	75.0	40.0 - 135	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	85.6	50.0 - 150

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/4/2018

Reviewed By: DPV

Date: 10/5/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-002-SA	Date Extracted: 10-02-2018	ICal: PCDDFAL4-6-9-18	Acquired: 10-04-2018
Client ID: T182898-02	Date Received: 09-21-2018	GC Column: DB5MS	2005 WHO TEQ: 0.0438
Matrix: Soil	Amount: 5.03 g	Units: pg/g	Basis: Dry Weight
Batch No: X4664	% Solids: 77.81		

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.0523		-	0.0273				
1,2,3,7,8-PeCDD	ND	0.132		-	0.0570				
1,2,3,4,7,8-HxCDD	ND	0.224		-	0.0793				
1,2,3,6,7,8-HxCDD	ND	0.203		-	0.0940	Total TCDD	ND	0.0523	
1,2,3,7,8,9-HxCDD	ND	0.196		-	0.0823	Total PeCDD	ND	0.132	
1,2,3,4,6,7,8-HpCDD	ND	0.359		-	0.0842	Total HxCDD	ND	0.224	
OCDD	ND	0.512		-	0.172	Total HpCDD	ND	0.359	
2,3,7,8-TCDF	ND	0.0517		-	0.0269				
1,2,3,7,8-PeCDF	ND	0.151		-	0.0449				
2,3,4,7,8-PeCDF	ND	0.136		-	0.0468				
1,2,3,4,7,8-HxCDF	ND	0.128		-	0.0437				
1,2,3,6,7,8-HxCDF	ND	0.133		-	0.0417				
2,3,4,6,7,8-HxCDF	ND	0.147		-	0.0574				
1,2,3,7,8,9-HxCDF	0.438	-	J	0.0438	0.0657	Total TCDF	0.838	-	J
1,2,3,4,6,7,8-HpCDF	ND	0.135		-	0.0747	Total PeCDF	1.30	-	J
1,2,3,4,7,8,9-HpCDF	ND	0.157		-	0.0883	Total HxCDF	0.438	-	J
OCDF	ND	0.322		-	0.170	Total HpCDF	ND	0.157	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.7	40.0 - 135	
13C-1,2,3,7,8-PeCDD	85.0	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	100	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	99.7	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	84.4	40.0 - 135	
13C-OCDD	68.8	40.0 - 135	
13C-2,3,7,8-TCDF	93.1	40.0 - 135	
13C-1,2,3,7,8-PeCDF	74.0	40.0 - 135	
13C-2,3,4,7,8-PeCDF	83.3	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	109	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	102	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	96.2	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	85.5	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	85.0	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	77.8	40.0 - 135	
13C-OCDF	67.4	40.0 - 135	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	88.5	50.0 - 150

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/4/2018

Reviewed By: DPV

Date: 10/5/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-003-SA	Date Extracted: 10-02-2018	ICal: PCDDFAL4-6-9-18	Acquired: 10-04-2018
Client ID: T182898-03	Date Received: 09-21-2018	GC Column: DB5MS	2005 WHO TEQ: 0.0
Matrix: Soil	Amount: 5.03 g	Units: pg/g	Basis: Dry Weight
Batch No: X4664	% Solids: 85.97		

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.129		-	0.0273				
1,2,3,7,8-PeCDD	ND	0.153		-	0.0570				
1,2,3,4,7,8-HxCDD	ND	0.186		-	0.0793				
1,2,3,6,7,8-HxCDD	ND	0.201		-	0.0940	Total TCDD	ND	0.129	
1,2,3,7,8,9-HxCDD	ND	0.178		-	0.0823	Total PeCDD	ND	0.153	
1,2,3,4,6,7,8-HpCDD	ND	0.286		-	0.0842	Total HxCDD	ND	0.201	
OCDD	ND	0.591		-	0.172	Total HpCDD	ND	0.286	
2,3,7,8-TCDF	ND	0.0778		-	0.0269				
1,2,3,7,8-PeCDF	ND	0.0987		-	0.0449				
2,3,4,7,8-PeCDF	ND	0.122		-	0.0468				
1,2,3,4,7,8-HxCDF	ND	0.124		-	0.0437				
1,2,3,6,7,8-HxCDF	ND	0.134		-	0.0417				
2,3,4,6,7,8-HxCDF	ND	0.151		-	0.0574				
1,2,3,7,8,9-HxCDF	ND	0.175		-	0.0657	Total TCDF	ND	0.0778	
1,2,3,4,6,7,8-HpCDF	ND	0.114		-	0.0747	Total PeCDF	ND	0.122	
1,2,3,4,7,8,9-HpCDF	ND	0.115		-	0.0883	Total HxCDF	ND	0.175	
OCDF	ND	0.339		-	0.170	Total HpCDF	ND	0.115	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	93.8	40.0 - 135	
13C-1,2,3,7,8-PeCDD	93.9	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	102	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	101	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	89.9	40.0 - 135	
13C-OCDD	78.4	40.0 - 135	
13C-2,3,7,8-TCDF	93.9	40.0 - 135	
13C-1,2,3,7,8-PeCDF	79.2	40.0 - 135	
13C-2,3,4,7,8-PeCDF	73.5	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	112	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	110	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	101	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	93.3	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	88.3	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	89.0	40.0 - 135	
13C-OCDF	76.1	40.0 - 135	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	90.0	50.0 - 150

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/4/2018

Reviewed By: DPV

Date: 10/5/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X4663

Date Extracted: 10-01-2018
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL4-6-9-18
GC Column: DB5MS
Units: pg/L

Acquired: 10-02-2018
2005 WHO TEQ: 0.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.357		-	0.178				
1,2,3,7,8-PeCDD	ND	0.691		-	0.289				
1,2,3,4,7,8-HxCDD	ND	0.773		-	0.311				
1,2,3,6,7,8-HxCDD	ND	0.842		-	0.370	Total TCDD	ND	0.357	
1,2,3,7,8,9-HxCDD	ND	0.741		-	0.324	Total PeCDD	ND	0.691	
1,2,3,4,6,7,8-HpCDD	ND	1.42		-	0.393	Total HxCDD	ND	0.842	
OCDD	ND	4.92		-	1.10	Total HpCDD	ND	1.42	
2,3,7,8-TCDF	ND	0.275		-	0.174				
1,2,3,7,8-PeCDF	ND	0.679		-	0.300				
2,3,4,7,8-PeCDF	ND	0.706		-	0.311				
1,2,3,4,7,8-HxCDF	ND	0.872		-	0.290				
1,2,3,6,7,8-HxCDF	ND	0.825		-	0.264				
2,3,4,6,7,8-HxCDF	ND	0.870		-	0.318				
1,2,3,7,8,9-HxCDF	ND	1.11		-	0.359	Total TCDF	ND	0.275	
1,2,3,4,6,7,8-HpCDF	ND	1.08		-	0.346	Total PeCDF	ND	0.706	
1,2,3,4,7,8,9-HpCDF	ND	1.04		-	0.484	Total HxCDF	ND	1.11	
OCDF	ND	1.21		-	0.858	Total HpCDF	ND	1.08	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.4	40.0 - 135	
13C-1,2,3,7,8-PeCDD	83.5	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	90.3	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	91.4	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	82.4	40.0 - 135	
13C-OCDD	80.5	40.0 - 135	
13C-2,3,7,8-TCDF	91.0	40.0 - 135	
13C-1,2,3,7,8-PeCDF	86.4	40.0 - 135	
13C-2,3,4,7,8-PeCDF	86.2	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	94.4	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	91.6	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	89.1	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	81.0	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	85.3	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	83.9	40.0 - 135	
13C-OCDF	75.3	40.0 - 135	
Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	88.5	50.0 - 150	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/3/2018

Reviewed By: DPV

Date: 10/3/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X4663

Date Extracted: 10-01-2018
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL4-6-9-18
GC Column: DB5MS
Units: ng/ml

Acquired: 10-02-2018
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.37	7.00 - 13.0	
1,2,3,7,8-PeCDD	45.1	35.0 - 65.0	
1,2,3,4,7,8-HxCDD	48.8	35.0 - 65.0	
1,2,3,6,7,8-HxCDD	48.8	35.0 - 65.0	
1,2,3,7,8,9-HxCDD	47.2	35.0 - 65.0	
1,2,3,4,6,7,8-HpCDD	50.6	35.0 - 65.0	
OCDD	96.3	70.0 - 130	
2,3,7,8-TCDF	10.1	7.00 - 13.0	
1,2,3,7,8-PeCDF	51.4	35.0 - 65.0	
2,3,4,7,8-PeCDF	51.9	35.0 - 65.0	
1,2,3,4,7,8-HxCDF	50.5	35.0 - 65.0	
1,2,3,6,7,8-HxCDF	51.3	35.0 - 65.0	
2,3,4,6,7,8-HxCDF	51.5	35.0 - 65.0	
1,2,3,7,8,9-HxCDF	51.6	35.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	50.0	35.0 - 65.0	
1,2,3,4,7,8,9-HpCDF	50.1	35.0 - 65.0	
OCDF	105	70.0 - 130	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	82.3	40.0 - 135	
13C-1,2,3,7,8-PeCDD	74.6	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	76.9	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	75.4	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	67.4	40.0 - 135	
13C-OCDD	64.6	40.0 - 135	
13C-2,3,7,8-TCDF	87.2	40.0 - 135	
13C-1,2,3,7,8-PeCDF	69.4	40.0 - 135	
13C-2,3,4,7,8-PeCDF	74.7	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	80.5	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	77.1	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	78.0	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	71.2	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	69.8	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	66.9	40.0 - 135	
13C-OCDF	60.5	40.0 - 135	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	88.3	50.0 - 150

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/3/2018

Reviewed By: DPV

Date: 10/3/2018

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EPA Method 8290
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 11895-004-SA
Client ID: T182898-29
Matrix: Aqueous
Batch No: X4663

Date Extracted: 10-01-2018
Date Received: 09-21-2018
Amount: 0.983 L

ICal: PCDDFAL4-6-9-18
GC Column: DB5MS
Units: pg/L

Acquired: 10-02-2018
2005 WHO TEQ: 0.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.340		-	0.178				
1,2,3,7,8-PeCDD	ND	0.515		-	0.289				
1,2,3,4,7,8-HxCDD	ND	0.561		-	0.311				
1,2,3,6,7,8-HxCDD	ND	0.597		-	0.370	Total TCDD	ND	0.340	
1,2,3,7,8,9-HxCDD	ND	0.531		-	0.324	Total PeCDD	ND	0.515	
1,2,3,4,6,7,8-HpCDD	ND	0.913		-	0.393	Total HxCDD	ND	0.597	
OCDD	ND	4.75		-	1.10	Total HpCDD	ND	0.913	
2,3,7,8-TCDF	ND	0.345		-	0.174				
1,2,3,7,8-PeCDF	ND	0.462		-	0.300				
2,3,4,7,8-PeCDF	ND	0.499		-	0.311				
1,2,3,4,7,8-HxCDF	ND	0.439		-	0.290				
1,2,3,6,7,8-HxCDF	ND	0.474		-	0.264				
2,3,4,6,7,8-HxCDF	ND	0.504		-	0.318				
1,2,3,7,8,9-HxCDF	ND	0.562		-	0.359	Total TCDF	ND	0.345	
1,2,3,4,6,7,8-HpCDF	ND	0.616		-	0.346	Total PeCDF	ND	0.499	
1,2,3,4,7,8,9-HpCDF	ND	0.664		-	0.484	Total HxCDF	ND	0.562	
OCDF	ND	1.10		-	0.858	Total HpCDF	ND	0.664	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	94.4	40.0 - 135	
13C-1,2,3,7,8-PeCDD	88.5	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	91.5	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	95.5	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	92.3	40.0 - 135	
13C-OCDD	92.0	40.0 - 135	
13C-2,3,7,8-TCDF	99.8	40.0 - 135	
13C-1,2,3,7,8-PeCDF	93.8	40.0 - 135	
13C-2,3,4,7,8-PeCDF	95.2	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	93.0	40.0 - 135	
13C-1,2,3,6,7,8-HxCDF	91.1	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	87.3	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	91.5	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	88.1	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	93.8	40.0 - 135	
13C-OCDF	86.7	40.0 - 135	
Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	90.3	50.0 - 150	

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
DNQ	Analyte concentration is below calibration range
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected at Detection Limit Level
NP	Not Provided
P	Pre-filtered through a Whatman 0.7um GF/F filter
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: _____

Date: 10/3/2018

Reviewed By: DPV

Date: 10/3/2018

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SUBCONTRACT ORDER

SunStar Laboratories, Inc.

T182898

SENDING LABORATORY:

SunStar Laboratories, Inc.
25712 Commercentre Drive
Lake Forest, CA 92630
Phone: (949) 297-5020
Fax: (949) 297-5027
Project Manager: Kris Kubota

RECEIVING LABORATORY:

Frontier Analytical Laboratory
5172 Hillsdale Circle
El Dorado Hills, CA 95762
Phone :(916) 934-0900
Fax: (916) 934-0999

11895
1 oc

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T182898-01	**Soil**	**Sampled:09/19/18 07:45**		
Misc. Subcontract (see notes)	10/16/18 15:00	03/18/19 07:45		8290 Dioxins/Furans
Containers Supplied:				
Sample ID: T182898-02	**Soil**	**Sampled:09/19/18 07:45**		
Misc. Subcontract (see notes)	10/16/18 15:00	03/18/19 07:45		8290 Dioxins/Furans
Containers Supplied:				
Sample ID: T182898-03	**Soil**	**Sampled:09/19/18 07:47**		
Misc. Subcontract (see notes)	10/16/18 15:00	03/18/19 07:47		8290 Dioxins/Furans
Containers Supplied:				
Sample ID: T182898-29	**Water**	**Sampled:09/19/18 15:15**		
Misc. Subcontract (see notes)	10/16/18 15:00	03/18/19 15:15		8290 Dioxins/Furans
Containers Supplied:				

Released By	Date	Received By	Date
	9/20/18		9/21/18 1010

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **11895**

Client:	SunStar Laboratories
Client Project ID:	T182898
Date Received:	09/21/2018
Time Received:	10:10 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	4
Duplicates:	1
Storage Location:	R-3

Method of Delivery:	Golden State Overnight
Tracking Number:	542125424
Shipping Container Received Intact	Yes
Custody seals(s) present?	Yes
Custody seals(s) intact?	Yes
Sample Arrival Temperature (C)	1
Cooling Method	Blue Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test aqueous sample for residual Chlorine	Yes
Sodium Thiosulfate Added	No
Adequate Sample Volume	Yes
Appropriate Sample Container	Yes
pH Range of Aqueous Sample	Between 4 and 9

Anomalies or additional comments:

Please note that samples 1-3 were received in clear glass jars. NELAP requires samples be received in amber glass bottles or jars. Although this anomaly will not affect your results, we are required by NELAP to make a note of it. We will proceed with analysis unless directed otherwise by you.

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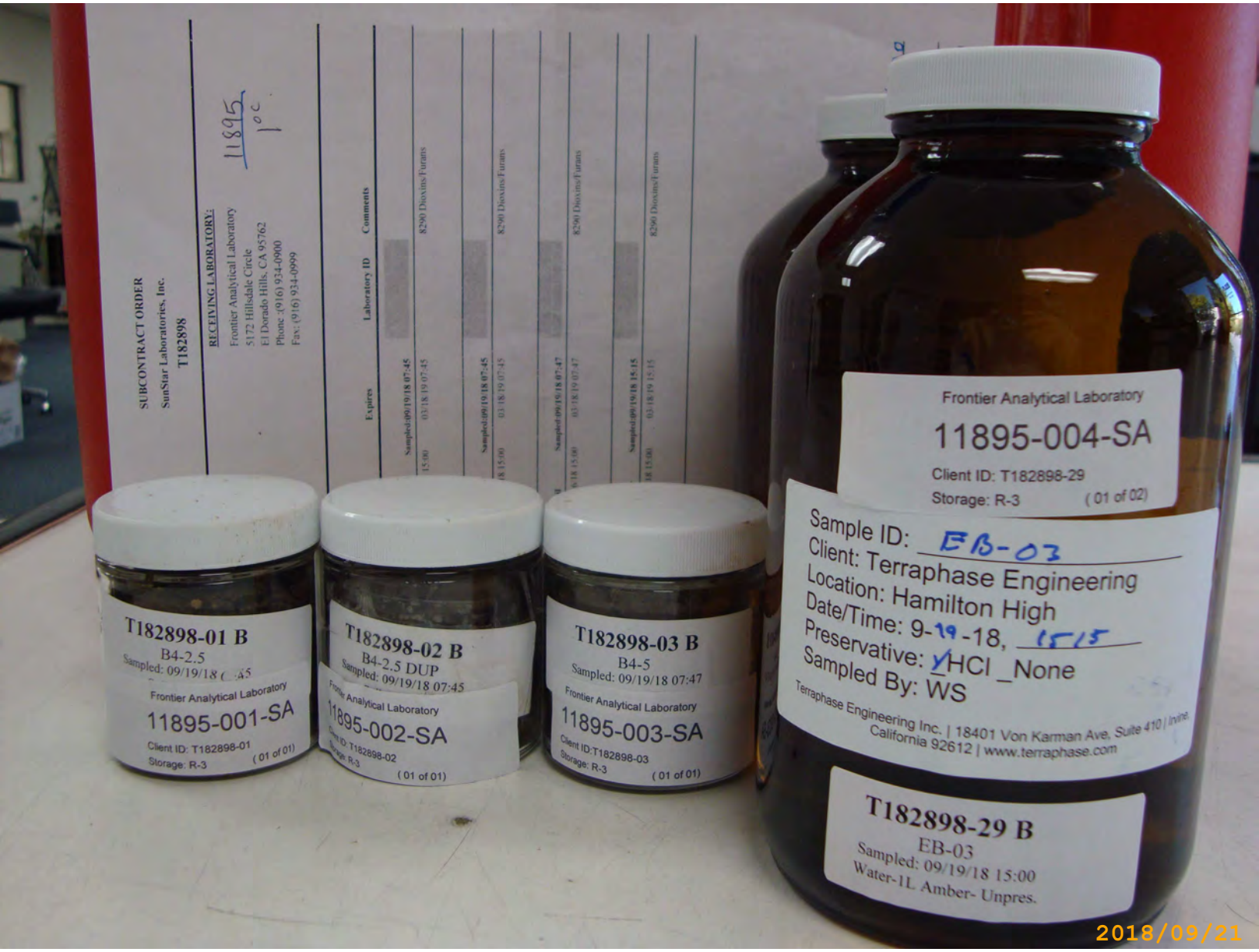

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SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRA PHASE ENGINEERING INC
Address: 18409 VON KARMAN AVE IRVINE CA
Phone: 949 377 2227 Fax:
Project Manager: CLARE STEEDMAN

Date: 9/19/18 Page: 1 Of 2
Project Name: HAMILTON HIGHSCHOOL
Collector: DAN PHELPS WES SKILLINGS Client Project #: S030.008
Batch #: T182898 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270C	~~8021 BTEX~~ OCPs (8081)	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain*	6010/7000 Title 22 Metals	6020 ICP-MS Metals	Dioxins & Furans (8290)	PAHs (8270C SIM)	Pb & As (6020)	Laboratory ID #	Comments/Preservative	Total # of containers
B4-2.5	9/19/18	0745	S	5VOA 1802 (1)	X			X				X	X		X	X		01		
B4-2.5-DUP		0745			X			X				X	X		X	X		02		
B4-5.0		0747		5VOA 1802 (1)				X				X	X		X	X		03		
B63-5.0 (19)		0845		5VOA 1802	X							X	X					04		
B63-10.0 (24)		0848			X							X	X					05		
B63-15.0 (29)		0850			X							X	X					06		
B63-0.5		1225		(1) 802					X								X	07		
B63-1.5		1228							X								X	08		
B63-2.5		1230							X								X	09		
B66-0.5		1245							X								X	10		
B66-1.5		1248							X								X	11		
B66-2.5		1250							X								X	12		
~~B66~~ B71-0.5		1320							X								X	13		
B64-0.5		1330							X								X	14		
B64-1.5		1333							X								X	15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Dan Phelps	9/19/18 1540	[signature]	9-19-18 1540
[signature]	9-19-18 1856	[signature]	9-19-18 18:56

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.1

Turn around time:

Notes
* FOR TPH ANALYZE FOR TPH GRO AND TPH DRO/ORO
** PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171038

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 2 Of 2

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: 1182898 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270 C	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ~~ICP-MS Metals~~ Pb & As	OCPs (8081)	Dioxins Furans (8290)	PAHs (8270 C SIM)	Laboratory ID #	Comments/Preservative	Total # of containers
B64-2.5	9/19/18	1335	S	8 oz										X	X			16		
B73-0.5		1410												X	X			17		
B73-1.5		1413												X	X			18		
B73-2.5		1415												X	X			19		
B74-0.5		1425												X	X			20		
B74-1.5		1427												X	X			21		
B74-2.5		1430												X	X			22		
B48-0.5		1440												X	X			23		
B48-1.5		1443												X	X			24		
B48-2.5		1445												X	X			25		
B12-0.5		1455												X	X			26		
B12-1.5		1457												X	X			27		
B12-2.5		1500												X	X			28		
EB-03	9/19/18	1615	W	6 VOA 6 1L	X			X				X	X	X	X	X	X	29		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9/19/18 1540		9-19-18 1540
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9-19-18 1856		9-19-18 18:56
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.1

Turn around time: _____

Notes

* TPH - ANALYZE FOR TPH-GRO AND TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171039

SunStar Laboratories

Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182898

Client Name: TERRAPHASE

Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☐ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 9.19.18 1540

Lab Received by: SUNNY

Date/Time Lab Received: 9.19.18 1856

Total number of coolers received:

Temperature: Cooler #1	2.9	°C +/- the CF (1.2°C) =	4.1	°C corrected temperature
Temperature: Cooler #2		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature: Cooler #3		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	☒ **Yes**	☐ **No**
If NO:				
Samples received on ice?		☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?		☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☐ Yes	☒ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested ?	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BC 9.20.18

Comments:

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SunStar Laboratories

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SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☐ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: B4-2.5DUP 4oz JAR RECEIVED BROKEN & IN A PLASTIC BAG. ALL 6-5035 KITS HAVE TERRAPHASE COVERING THE WEIGHTS ON EACH VOA. HCL WRITTEN ON EACH VOA OF THE 5035 KITS AS WELL

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Clare Steedman [clare.steedman@terraphase.com]
Sent: Thursday, September 20, 2018 11:38 AM
To: kris@sunstarlabs.com
Subject: RE: Hamilton High School
Attachments: image003.jpg; image001.png

Hi ⁺ riŰḱ

Pƺ aŰ Ű r Űp nŰ b ƺ Ω˘ ThankŰ

Clare Steedman, P.G.
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Kris Kubota
Project Manager/Regional Account Manager

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/27/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/19/18 18:56
Logged In By:	Brian Charon	Date Logged In:	09/20/18 08:06

Samples Received at:	**4.1°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	No		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:47	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:47	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:47	
8260 5035	09/27/18 15:00	5	10/03/18 07:47	
8270C	09/27/18 15:00	5	10/03/18 07:47	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:47	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-04 B63-5.0(19) [Soil] Sampled 09/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:45	
8260 5035	09/27/18 15:00	5	10/03/18 08:45	
T182898-05 B63-10.0(24) [Soil] Sampled 09/19/18 08:48 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:48	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:48	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:48	
8260 5035	09/27/18 15:00	5	10/03/18 08:48	
T182898-06 B63-15.0(29) [Soil] Sampled 09/19/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:50	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:50	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:50	
8260 5035	09/27/18 15:00	5	10/03/18 08:50	
T182898-07 B63-0.5 [Soil] Sampled 09/19/18 12:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:25	
T182898-08 B63-1.5 [Soil] Sampled 09/19/18 12:28 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:28	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:28	
T182898-09 B63-2.5 [Soil] Sampled 09/19/18 12:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:30	
T182898-10 B66-0.5 [Soil] Sampled 09/19/18 12:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:45	
T182898-11 B66-1.5 [Soil] Sampled 09/19/18 12:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:48	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:48	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-12 B66-2.5 [Soil] Sampled 09/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:50	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:50	
T182898-13 B71-0.5 [Soil] Sampled 09/19/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:20	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:20	
T182898-14 B64-0.5 [Soil] Sampled 09/19/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:30	
T182898-15 B64-1.5 [Soil] Sampled 09/19/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:33	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:33	
T182898-16 B64-2.5 [Soil] Sampled 09/19/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:35	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:35	
T182898-17 B73-0.5 [Soil] Sampled 09/19/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:10	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:10	
T182898-18 B73-1.5 [Soil] Sampled 09/19/18 14:13 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:13	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:13	
T182898-19 B73-2.5 [Soil] Sampled 09/19/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:15	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:15	
T182898-20 B74-0.5 [Soil] Sampled 09/19/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:25	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-21 B74-1.5 [Soil] Sampled 09/19/18 14:27 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:27	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:27	
T182898-22 B74-2.5 [Soil] Sampled 09/19/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:30	
T182898-23 B48-0.5 [Soil] Sampled 09/19/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:40	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:40	
T182898-24 B48-1.5 [Soil] Sampled 09/19/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:43	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:43	
T182898-25 B48-2.5 [Soil] Sampled 09/19/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:45	
T182898-26 B18-0.5 [Soil] Sampled 09/19/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:55	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:55	
T182898-27 B18-1.5 [Soil] Sampled 09/19/18 14:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:57	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:57	
T182898-28 B18-2.5 [Soil] Sampled 09/19/18 15:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 15:00	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 15:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 15:15	
6020 Metals by ICP-MS	09/27/18 15:00	5	03/18/19 15:15	As and Pb only
8015 CC (D/MO)	09/27/18 15:00	5	09/26/18 15:15	
8015 m Gas Purge	09/27/18 15:00	5	10/03/18 15:15	
8081 Pesticides	09/27/18 15:00	5	09/26/18 15:15	
8260	09/27/18 15:00	5	10/03/18 15:15	
8270C	09/27/18 15:00	5	09/26/18 15:15	
8270C PAH SIM	09/27/18 15:00	5	09/26/18 15:15	

Frontier Analytical Laboratory

T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:47	8290 Dioxins/Furans
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 15:15	8290 Dioxins/Furans

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

28 November 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 18:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi For Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B18-2.5	T182898-28	Soil	09/19/18 15:00	09/19/18 18:56

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:04

DETECTIONS SUMMARY

Sample ID: B18-2.5 **Laboratory ID:** T182898-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**0.38**	0.10	mg/l	STLC Waste Extraction T	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:04

B18-2.5

T182898-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
STLC Metals by 6000/7000 Series Methods									
Arsenic	**0.38**	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:04

STLC Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8111923 - STLC Metals										
Blank (8111923-BLK1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	ND	0.10	mg/l							
Arsenic	ND	0.10	"							
LCS (8111923-BS1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	9.57	0.10	mg/l	10.0		95.7	75-125			
Arsenic	10.9	0.10	"	10.0		109	75-125			
Matrix Spike (8111923-MS1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.4	0.10	mg/l	10.0	3.56	88.2	75-125			
Arsenic	10.1	0.10	"	10.0	0.846	92.5	75-125			
Matrix Spike Dup (8111923-MSD1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.6	0.10	mg/l	10.0	3.56	90.3	75-125	1.64	30	
Arsenic	10.8	0.10	"	10.0	0.846	99.4	75-125	6.61	30	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:04

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRA PHASE ENGINEERING INC
Address: 18409 VON KARMAN AVE IRVINE CA
Phone: 949 377 2227 Fax:
Project Manager: CLARE STEEDMAN

Date: 9/19/18 Page: 1 Of 2
Project Name: HAMILTON HIGHSCHOOL
Collector: DAN PHELPS WES SKILLINGS Client Project #: S030.008
Batch #: T182898 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270C	~~8021 BTEX~~ OCPs (8081)	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain*	6010/7000 Title 22 Metals	6020 ICP-MS Metals	Dioxins & Furans (8290)	PAHs (8270C SIM)	Pb & As (6020)	Laboratory ID #	Comments/Preservative	Total # of containers
B4-2.5	9/19/18	0745	S	5VOA 1802 (1)	X			X				X	X		X	X		01		
B4-2.5-DUP		0745			X			X				X	X		X	X		02		
B4-5.0		0747		5VOA 1802 (1)				X				X	X		X	X		03		
B63-5.0 (19)		0845		5VOA 1802	X							X	X					04		
B63-10.0 (24)		0848			X							X	X					05		
B63-15.0 (29)		0850			X							X	X					06		
B63-0.5		1225		(1) 802					X								X	07		
B63-1.5		1228							X								X	08		
B63-2.5		1230							X								X	09		
B66-0.5		1245							X								X	10		
B66-1.5		1248							X								X	11		
B66-2.5		1250							X								X	12		
~~B66~~ B71-0.5		1320							X								X	13		
B64-0.5		1330							X								X	14		
B64-1.5		1333							X								X	15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Dan Phelps	9/19/18 1540	[signature]	9-19-18 1540
[signature]	9-19-18 1856	[signature]	9-19-18 18:56

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.1

Turn around time:

Notes
* FOR TPH ANALYZE FOR TPH GRO AND TPH DRO/ORO
** PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171038

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 2 Of 2

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: 1182898 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270 C	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ~~ICP-MS Metals~~ Pb & As	OCPs (8081)	Dioxins Furans (8290)	PAHs (8270 C SIM)	Laboratory ID #	Comments/Preservative	Total # of containers
B64-2.5	9/19/18	1335	S	8 oz										X	X			16		
B73-0.5		1410												X	X			17		
B73-1.5		1413												X	X			18		
B73-2.5		1415												X	X			19		
B74-0.5		1425												X	X			20		
B74-1.5		1427												X	X			21		
B74-2.5		1430												X	X			22		
B48-0.5		1440												X	X			23		
B48-1.5		1443												X	X			24		
B48-2.5		1445												X	X			25		
B12-0.5		1455												X	X			26		
B12-1.5		1457												X	X			27		
B12-2.5		1500												X	X			28		
EB-03	9/19/18	1615	W	6 VOA 6 1L	X			X				X	X	X	X	X	X	29		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9/19/18 1540		9-19-18 1540
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9-19-18 1856		9-19-18 18:56
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.1

Turn around time: _____

Notes

* TPH - ANALYZE FOR TPH-GRO AND TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171039

SunStar Laboratories

Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182898

Client Name: TERRAPHASE

Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☐ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 9.19.18 1540

Lab Received by: SUNNY

Date/Time Lab Received: 9.19.18 1856

Total number of coolers received:

Temperature: Cooler #1	2.9	°C +/- the CF (1.2°C) =	4.1	°C corrected temperature
Temperature: Cooler #2		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature: Cooler #3		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	☒ **Yes**	☐ **No**
If NO:				
Samples received on ice?		☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?		☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☐ Yes	☒ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested ?	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BC 9.20.18

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☐ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: B4-2.5DUP 4oz JAR RECEIVED BROKEN & IN A PLASTIC BAG. ALL 6-5035 KITS HAVE TERRAPHASE COVERING THE WEIGHTS ON EACH VOA. HCL WRITTEN ON EACH VOA OF THE 5035 KITS AS WELL

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Clare Steedman [clare.steedman@terraphase.com]
Sent: Thursday, September 20, 2018 11:38 AM
To: kris@sunstarlabs.com
Subject: RE: Hamilton High School
Attachments: image003.jpg; image001.png

Hi ⁺ riŰḱ

Pƺ aŰ Ű r Űp nŰ b ƺ Ω˘ ThankŰ

Clare Steedman, P.G.
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T rraphaŰ Ō in rin Inc˘
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To: &ƺar ي t 0" an 2cƺar ˘Űt 0" an1 t rraphaŰ˘c " 3
Cc: 6 an Ph ƺpŰ20an˘ph ƺpŰ1 t rraphaŰ˘c " 3
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Thank 4 $ Ű " $ch &ƺar 7

Kris Kubota
Project Manager/Regional Account Manager

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From: Rose Fasheh [Rose@sunstarlabs.com]
Sent: Monday, November 19, 2018 11:37 AM
To: 'Clare Steedman'
Cc: 'Mike'
Subject: Additional Request: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898
Attachments: T182803_WKO_02.pdf; T182898_WKO_02.pdf; T183211_WKO_02.pdf; T183212_WKO_03.pdf

Clare,

Please find attached revised work orders reflecting the additional STLC testing. Details are documented in the comments section (right hand side). We will have the additional STLC results for you before end of day Wednesday 11/28 as a standard 5-day TAT.

Let us know if you need anything else!

Happy Thanksgiving ☺

Rose Fasheh
Project Manager

SunStar Laboratories

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
Please note that SunStar Laboratories will be observing the Thanksgiving Holidays on Thursday and Friday, November 22nd and 23rd. In addition, GSO will not have scheduled service on Thursday, November 22nd. If you have any short hold samples arriving near or during these days, please contact your Project Manager in advance to ensure all holding times are met for your samples. SunStar will be available on Saturday, November 24th if needed to receive samples. Please let your Project Manager know if you will ship or deliver samples on this day.

We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:19 AM
To: Rose Fasheh
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Rose,

Thanks for the heads up. Standard turn is fine.

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Rose Fasheh <Rose@sunstarlabs.com>
Sent: Monday, November 19, 2018 11:18 AM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Good morning Clare,

Kris no longer works with SunStar, but I will go ahead and get those going for you. Is a standard 5-day TAT okay, or did you need the results expedited?

Thank you,

Rose Fasheh
Project Manager

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:12 AM
To: kris@sunstarlabs.com
Subject: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Kris,

Would you please analyze the following samples for **STLC** analysis?

B03-1.5 (T182803-28) for lead
B10-0.5 (T182803-42) for lead

B91-1.5 (T183211-05) for lead

B12-0.5 (T183212-17) for lead
B25-05 (T183212-14) for lead

B18-2.5 (T182898-28) for arsenic

Thank you,

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/27/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/19/18 18:56
Logged In By:	Brian Charon	Date Logged In:	09/20/18 08:06

Samples Received at:	**4.1°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	No		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:47	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:47	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:47	
8260 5035	09/27/18 15:00	5	10/03/18 07:47	
8270C	09/27/18 15:00	5	10/03/18 07:47	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:47	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-04 B63-5.0(19) [Soil] Sampled 09/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:45	
8260 5035	09/27/18 15:00	5	10/03/18 08:45	
T182898-05 B63-10.0(24) [Soil] Sampled 09/19/18 08:48 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:48	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:48	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:48	
8260 5035	09/27/18 15:00	5	10/03/18 08:48	
T182898-06 B63-15.0(29) [Soil] Sampled 09/19/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:50	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:50	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:50	
8260 5035	09/27/18 15:00	5	10/03/18 08:50	
T182898-07 B63-0.5 [Soil] Sampled 09/19/18 12:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:25	
T182898-08 B63-1.5 [Soil] Sampled 09/19/18 12:28 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:28	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:28	
T182898-09 B63-2.5 [Soil] Sampled 09/19/18 12:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:30	
T182898-10 B66-0.5 [Soil] Sampled 09/19/18 12:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:45	
T182898-11 B66-1.5 [Soil] Sampled 09/19/18 12:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:48	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:48	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-12 B66-2.5 [Soil] Sampled 09/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:50	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:50	
T182898-13 B71-0.5 [Soil] Sampled 09/19/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:20	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:20	
T182898-14 B64-0.5 [Soil] Sampled 09/19/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:30	
T182898-15 B64-1.5 [Soil] Sampled 09/19/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:33	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:33	
T182898-16 B64-2.5 [Soil] Sampled 09/19/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:35	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:35	
T182898-17 B73-0.5 [Soil] Sampled 09/19/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:10	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:10	
T182898-18 B73-1.5 [Soil] Sampled 09/19/18 14:13 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:13	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:13	
T182898-19 B73-2.5 [Soil] Sampled 09/19/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:15	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:15	
T182898-20 B74-0.5 [Soil] Sampled 09/19/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:25	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-21 B74-1.5 [Soil] Sampled 09/19/18 14:27 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:27	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:27	
T182898-22 B74-2.5 [Soil] Sampled 09/19/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:30	
T182898-23 B48-0.5 [Soil] Sampled 09/19/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:40	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:40	
T182898-24 B48-1.5 [Soil] Sampled 09/19/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:43	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:43	
T182898-25 B48-2.5 [Soil] Sampled 09/19/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:45	
T182898-26 B18-0.5 [Soil] Sampled 09/19/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:55	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:55	
T182898-27 B18-1.5 [Soil] Sampled 09/19/18 14:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:57	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:57	
T182898-28 B18-2.5 [Soil] Sampled 09/19/18 15:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 15:00	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 15:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Analysis	Due	TAT	Expires	Comments
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 15:15	
6020 Metals by ICP-MS	09/27/18 15:00	5	03/18/19 15:15	As and Pb only
8015 CC (D/MO)	09/27/18 15:00	5	09/26/18 15:15	
8015 m Gas Purge	09/27/18 15:00	5	10/03/18 15:15	
8081 Pesticides	09/27/18 15:00	5	09/26/18 15:15	
8260	09/27/18 15:00	5	10/03/18 15:15	
8270C	09/27/18 15:00	5	09/26/18 15:15	
8270C PAH SIM	09/27/18 15:00	5	09/26/18 15:15	

Frontier Analytical Laboratory

T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:47	8290 Dioxins/Furans
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 15:15	8290 Dioxins/Furans

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/19/2018 4:58:07PM

WORK ORDER

T182898

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/27/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/19/18 18:56
Logged In By:	Brian Charon	Date Logged In:	09/20/18 08:06

Samples Received at: **4.1°C**

Custody Seals	No	Received On Ice	Yes
Containers Intact	No		
COC/Labels Agree	Yes		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 07:47	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:47	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:47	
8260 5035	09/27/18 15:00	5	10/03/18 07:47	
8270C	09/27/18 15:00	5	10/03/18 07:47	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:47	
T182898-04 B63-5.0(19) [Soil] Sampled 09/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 08:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:45	
8260 5035	09/27/18 15:00	5	10/03/18 08:45	
T182898-05 B63-10.0(24) [Soil] Sampled 09/19/18 08:48 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 08:48	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:48	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:48	
8260 5035	09/27/18 15:00	5	10/03/18 08:48	
T182898-06 B63-15.0(29) [Soil] Sampled 09/19/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 08:50	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:50	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:50	
8260 5035	09/27/18 15:00	5	10/03/18 08:50	
T182898-07 B63-0.5 [Soil] Sampled 09/19/18 12:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:25	
T182898-08 B63-1.5 [Soil] Sampled 09/19/18 12:28 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:28	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:28	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-09 B63-2.5 [Soil] Sampled 09/19/18 12:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:30	
T182898-10 B66-0.5 [Soil] Sampled 09/19/18 12:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:45	
T182898-11 B66-1.5 [Soil] Sampled 09/19/18 12:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:48	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:48	
T182898-12 B66-2.5 [Soil] Sampled 09/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:50	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:50	
T182898-13 B71-0.5 [Soil] Sampled 09/19/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:20	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:20	
T182898-14 B64-0.5 [Soil] Sampled 09/19/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:30	
T182898-15 B64-1.5 [Soil] Sampled 09/19/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:33	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:33	
T182898-16 B64-2.5 [Soil] Sampled 09/19/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:35	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:35	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-17 B73-0.5 [Soil] Sampled 09/19/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:10	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:10	
T182898-18 B73-1.5 [Soil] Sampled 09/19/18 14:13 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:13	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:13	
T182898-19 B73-2.5 [Soil] Sampled 09/19/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:15	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:15	
T182898-20 B74-0.5 [Soil] Sampled 09/19/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:25	
T182898-21 B74-1.5 [Soil] Sampled 09/19/18 14:27 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:27	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:27	
T182898-22 B74-2.5 [Soil] Sampled 09/19/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:30	
T182898-23 B48-0.5 [Soil] Sampled 09/19/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:40	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:40	
T182898-24 B48-1.5 [Soil] Sampled 09/19/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:43	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:43	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-25 B48-2.5 [Soil] Sampled 09/19/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:45	
T182898-26 B18-0.5 [Soil] Sampled 09/19/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:55	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:55	
T182898-27 B18-1.5 [Soil] Sampled 09/19/18 14:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:57	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:57	
T182898-28 B18-2.5 [Soil] Sampled 09/19/18 15:00 (GMT-08:00) Pacific Time (US &				**STLC for Arsenic added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 15:00	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 15:00	
STLC Pb	11/28/18 15:00	5	03/18/19 15:00	As only
STLC Leaching Procedure Metals	11/28/18 15:00	5	10/03/18 15:00	
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 15:15	
6020 Metals by ICP-MS	09/27/18 15:00	5	03/18/19 15:15	As and Pb only
8015 CC (D/MO)	09/27/18 15:00	5	09/26/18 15:15	
8015 m Gas Purge	09/27/18 15:00	5	10/03/18 15:15	
8081 Pesticides	09/27/18 15:00	5	09/26/18 15:15	
8260	09/27/18 15:00	5	10/03/18 15:15	
8270C	09/27/18 15:00	5	09/26/18 15:15	
8270C PAH SIM	09/27/18 15:00	5	09/26/18 15:15	

Frontier Analytical Laboratory

T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Frontier Analytical Laboratory				
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:47	8290 Dioxins/Furans
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 15:15	8290 Dioxins/Furans

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

22 July 2019

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 18:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeff Lee For Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B4-2.5	T182898-01	Soil	09/19/18 07:45	09/19/18 18:56
B4-2.5 DUP	T182898-02	Soil	09/19/18 07:45	09/19/18 18:56
B4-5	T182898-03	Soil	09/19/18 07:47	09/19/18 18:56
B63-5.0(19)	T182898-04	Soil	09/19/18 08:45	09/19/18 18:56
B63-10.0(24)	T182898-05	Soil	09/19/18 08:48	09/19/18 18:56
B63-15.0(29)	T182898-06	Soil	09/19/18 08:50	09/19/18 18:56
B63-0.5	T182898-07	Soil	09/19/18 12:25	09/19/18 18:56
B63-1.5	T182898-08	Soil	09/19/18 12:28	09/19/18 18:56
B63-2.5	T182898-09	Soil	09/19/18 12:30	09/19/18 18:56
B66-0.5	T182898-10	Soil	09/19/18 12:45	09/19/18 18:56
B66-1.5	T182898-11	Soil	09/19/18 12:48	09/19/18 18:56
B66-2.5	T182898-12	Soil	09/19/18 12:50	09/19/18 18:56
B71-0.5	T182898-13	Soil	09/19/18 13:20	09/19/18 18:56
B64-0.5	T182898-14	Soil	09/19/18 13:30	09/19/18 18:56
B64-1.5	T182898-15	Soil	09/19/18 13:33	09/19/18 18:56
B64-2.5	T182898-16	Soil	09/19/18 13:35	09/19/18 18:56
B73-0.5	T182898-17	Soil	09/19/18 14:10	09/19/18 18:56
B73-1.5	T182898-18	Soil	09/19/18 14:13	09/19/18 18:56
B73-2.5	T182898-19	Soil	09/19/18 14:15	09/19/18 18:56
B74-0.5	T182898-20	Soil	09/19/18 14:25	09/19/18 18:56
B74-1.5	T182898-21	Soil	09/19/18 14:27	09/19/18 18:56
B74-2.5	T182898-22	Soil	09/19/18 14:30	09/19/18 18:56
B48-0.5	T182898-23	Soil	09/19/18 14:40	09/19/18 18:56
B48-1.5	T182898-24	Soil	09/19/18 14:43	09/19/18 18:56
B48-2.5	T182898-25	Soil	09/19/18 14:45	09/19/18 18:56
B18-0.5	T182898-26	Soil	09/19/18 14:55	09/19/18 18:56

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Lee For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B18-1.5	T182898-27	Soil	09/19/18 14:57	09/19/18 18:56
B18-2.5	T182898-28	Soil	09/19/18 15:00	09/19/18 18:56
EB-03	T182898-29	Water	09/19/18 15:15	09/19/18 18:56

This report is revised to correct QC section for 6020 Arsenic and Lead. Original report has included LCS for metals not requested by client. This report has been revised to only report LCS metals relevant to the project. The RPD in the originally report is also reported in error and is revised in this version of the report. Actualy RPD acceptance value is 20. JL 7/22/19.

SunStar Laboratories, Inc.

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Jeff Lee For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

DETECTIONS SUMMARY

Sample ID: B4-2.5 **Laboratory ID:** T182898-01

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Bromofluorobenzene	**84**		ug/l	EPA 8015B/5035	
Antimony	**16**	3.0	mg/kg	EPA 6010b	
Arsenic	**23**	5.0	mg/kg	EPA 6010b	
Barium	**200**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**18**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**13**	3.0	mg/kg	EPA 6010b	
Nickel	**40**	2.0	mg/kg	EPA 6010b	
Vanadium	**83**	5.0	mg/kg	EPA 6010b	
Zinc	**84**	1.0	mg/kg	EPA 6010b	

Sample ID: B4-2.5 DUP **Laboratory ID:** T182898-02

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Bromofluorobenzene	**82**		ug/l	EPA 8015B/5035	
Antimony	**9.8**	3.0	mg/kg	EPA 6010b	
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Lead	**8.0**	3.0	mg/kg	EPA 6010b	
Nickel	**43**	2.0	mg/kg	EPA 6010b	
Vanadium	**84**	5.0	mg/kg	EPA 6010b	
Zinc	**84**	1.0	mg/kg	EPA 6010b	

Sample ID: B4-5 **Laboratory ID:** T182898-03

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Bromofluorobenzene	**87**		ug/l	EPA 8015B/5035	

SunStar Laboratories, Inc.

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Jeff Lee For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Sample ID: B4-5 **Laboratory ID:** T182898-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Antimony	**7.4**	3.0	mg/kg	EPA 6010b	
Arsenic	**16**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**39**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**34**	1.0	mg/kg	EPA 6010b	
Lead	**6.3**	3.0	mg/kg	EPA 6010b	
Nickel	**36**	2.0	mg/kg	EPA 6010b	
Vanadium	**74**	5.0	mg/kg	EPA 6010b	
Zinc	**82**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-5.0(19) **Laboratory ID:** T182898-04

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Bromofluorobenzene	**130**		ug/l	EPA 8015B/5035	
Arsenic	**18**	5.0	mg/kg	EPA 6010b	
Barium	**73**	1.0	mg/kg	EPA 6010b	
Chromium	**38**	2.0	mg/kg	EPA 6010b	
Cobalt	**12**	2.0	mg/kg	EPA 6010b	
Copper	**30**	1.0	mg/kg	EPA 6010b	
Nickel	**24**	2.0	mg/kg	EPA 6010b	
Vanadium	**58**	5.0	mg/kg	EPA 6010b	
Zinc	**54**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-10.0(24) **Laboratory ID:** T182898-05

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Bromofluorobenzene	**69**		ug/l	EPA 8015B/5035	
Antimony	**11**	3.0	mg/kg	EPA 6010b	
Arsenic	**12**	5.0	mg/kg	EPA 6010b	
Barium	**56**	1.0	mg/kg	EPA 6010b	
Chromium	**35**	2.0	mg/kg	EPA 6010b	
Cobalt	**10**	2.0	mg/kg	EPA 6010b	
Copper	**22**	1.0	mg/kg	EPA 6010b	
Lead	**6.3**	3.0	mg/kg	EPA 6010b	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Sample ID: B63-10.0(24) **Laboratory ID:** T182898-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Nickel	**22**	2.0	mg/kg	EPA 6010b	
Vanadium	**49**	5.0	mg/kg	EPA 6010b	
Zinc	**46**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-15.0(29) **Laboratory ID:** T182898-06

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Bromofluorobenzene	**73**		ug/l	EPA 8015B/5035	
Arsenic	**8.3**	5.0	mg/kg	EPA 6010b	
Barium	**41**	1.0	mg/kg	EPA 6010b	
Chromium	**23**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**15**	1.0	mg/kg	EPA 6010b	
Nickel	**18**	2.0	mg/kg	EPA 6010b	
Vanadium	**33**	5.0	mg/kg	EPA 6010b	
Zinc	**27**	1.0	mg/kg	EPA 6010b	

Sample ID: B63-0.5 **Laboratory ID:** T182898-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**10**	0.25	mg/kg	6020 ICP-MS	
Lead	**3.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B63-1.5 **Laboratory ID:** T182898-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B63-2.5 **Laboratory ID:** T182898-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B63-2.5 **Laboratory ID:** T182898-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**5.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-0.5 **Laboratory ID:** T182898-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**25**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-1.5 **Laboratory ID:** T182898-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B66-2.5 **Laboratory ID:** T182898-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B71-0.5 **Laboratory ID:** T182898-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-0.5 **Laboratory ID:** T182898-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**21**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B64-1.5 **Laboratory ID:** T182898-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B64-2.5 **Laboratory ID:** T182898-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**3.3**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDT	**6.6**	5.0	ug/kg	EPA 8081A	

Sample ID: B73-0.5 **Laboratory ID:** T182898-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.5**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B73-1.5 **Laboratory ID:** T182898-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B73-2.5 **Laboratory ID:** T182898-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-0.5 **Laboratory ID:** T182898-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B74-0.5 **Laboratory ID:** T182898-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**9.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-1.5 **Laboratory ID:** T182898-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B74-2.5 **Laboratory ID:** T182898-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-0.5 **Laboratory ID:** T182898-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-1.5 **Laboratory ID:** T182898-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B48-2.5 **Laboratory ID:** T182898-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.7**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B18-0.5 **Laboratory ID:** T182898-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**24**	0.25	mg/kg	6020 ICP-MS	
Lead	**26**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B18-1.5 **Laboratory ID:** T182898-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B18-2.5 **Laboratory ID:** T182898-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**63**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	
Arsenic	**0.38**	0.10	mg/l	STLC Waste Extraction T	

Sample ID: EB-03 **Laboratory ID:** T182898-29

Analyte	Result	Reporting Limit	Units	Method	Notes
C6-C12 (GRO)	**73**	50	ug/l	EPA 8015B	
Lead	**0.038**	0.0040	ug/l	6020 ICP-MS	
Toluene	**47**	0.50	ug/l	EPA 8260B	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
4-Bromofluorobenzene	**84**		ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
C6-C12 (GRO)	ND	340	"	"	"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*104 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**16**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**23**	5.0	"	"	"	"	"	"	
Barium	**200**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**18**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**13**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**40**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**83**	5.0	"	"	"	"	"	"	
Zinc	**84**	1.0	"	"	"	"	"	"	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	3.3	"	"	"	"	"	"	
Bromodichloromethane	ND	3.3	"	"	"	"	"	"	
Bromoform	ND	3.3	"	"	"	"	"	"	
Bromomethane	ND	3.3	"	"	"	"	"	"	
n-Butylbenzene	ND	3.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.3	"	"	"	"	"	"	
Chlorobenzene	ND	3.3	"	"	"	"	"	"	
Chloroethane	ND	3.3	"	"	"	"	"	"	
Chloroform	ND	3.3	"	"	"	"	"	"	
Chloromethane	ND	3.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.3	"	"	"	"	"	"	
Dibromochloromethane	ND	3.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	6.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.3	"	"	"	"	"	"	
Dibromomethane	ND	3.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.3	"	"	"	"	"	"	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.3	"	"	"	"	"	"	
Isopropylbenzene	ND	3.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.3	"	"	"	"	"	"	
Methylene chloride	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
n-Propylbenzene	ND	3.3	"	"	"	"	"	"	
Styrene	ND	3.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.3	"	"	"	"	"	"	
Tetrachloroethene	ND	3.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.3	"	"	"	"	"	"	
Trichloroethene	ND	3.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.3	"	"	"	"	"	"	
Vinyl chloride	ND	3.3	"	"	"	"	"	"	
Benzene	ND	3.3	"	"	"	"	"	"	
Toluene	ND	3.3	"	"	"	"	"	"	
Ethylbenzene	ND	3.3	"	"	"	"	"	"	
m,p-Xylene	ND	6.6	"	"	"	"	"	"	
o-Xylene	ND	3.3	"	"	"	"	"	"	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*103 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*129 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*66.6 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*73.1 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*68.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*77.3 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*83.5 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-2.5

T182898-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*104 %*	*18-137*		"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
4-Bromofluorobenzene	**82**		ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
C6-C12 (GRO)	ND	430	"	"	"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*100 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**9.8**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	**8.0**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**43**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**84**	5.0	"	"	"	"	"	"	
Zinc	**84**	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.5	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	3.5	"	"	"	"	"	"	
Bromodichloromethane	ND	3.5	"	"	"	"	"	"	
Bromoform	ND	3.5	"	"	"	"	"	"	
Bromomethane	ND	3.5	"	"	"	"	"	"	
n-Butylbenzene	ND	3.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.5	"	"	"	"	"	"	
Chlorobenzene	ND	3.5	"	"	"	"	"	"	
Chloroethane	ND	3.5	"	"	"	"	"	"	
Chloroform	ND	3.5	"	"	"	"	"	"	
Chloromethane	ND	3.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.5	"	"	"	"	"	"	
Dibromochloromethane	ND	3.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.5	"	"	"	"	"	"	
Dibromomethane	ND	3.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.5	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	3.5	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.5	"	"	"	"	"	"	
Isopropylbenzene	ND	3.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.5	"	"	"	"	"	"	
Methylene chloride	ND	3.5	"	"	"	"	"	"	
Naphthalene	ND	3.5	"	"	"	"	"	"	
n-Propylbenzene	ND	3.5	"	"	"	"	"	"	
Styrene	ND	3.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.5	"	"	"	"	"	"	
Tetrachloroethene	ND	3.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.5	"	"	"	"	"	"	
Trichloroethene	ND	3.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.5	"	"	"	"	"	"	
Vinyl chloride	ND	3.5	"	"	"	"	"	"	
Benzene	ND	3.5	"	"	"	"	"	"	
Toluene	ND	3.5	"	"	"	"	"	"	
Ethylbenzene	ND	3.5	"	"	"	"	"	"	
m,p-Xylene	ND	7.1	"	"	"	"	"	"	
o-Xylene	ND	3.5	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*125 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*59.9 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*65.9 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*61.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*71.0 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*78.0 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*97.0 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-2.5 DUP

T182898-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*107 %*	*18-137*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
4-Bromofluorobenzene	**87**		ug/kg	1	8092009	09/20/18	09/20/18	EPA 8015B/5035	
C6-C12 (GRO)	ND	390	"	"	"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*108 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**7.4**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**16**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**39**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**34**	1.0	"	"	"	"	"	"	
Lead	**6.3**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**36**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**74**	5.0	"	"	"	"	"	"	
Zinc	**82**	1.0	"	"	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.3	"	"	"	"	"	"	
Bromodichloromethane	ND	5.3	"	"	"	"	"	"	
Bromoform	ND	5.3	"	"	"	"	"	"	
Bromomethane	ND	5.3	"	"	"	"	"	"	
n-Butylbenzene	ND	5.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.3	"	"	"	"	"	"	
Chlorobenzene	ND	5.3	"	"	"	"	"	"	
Chloroethane	ND	5.3	"	"	"	"	"	"	
Chloroform	ND	5.3	"	"	"	"	"	"	
Chloromethane	ND	5.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
Dibromochloromethane	ND	5.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.3	"	"	"	"	"	"	
Dibromomethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.3	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.3	"	"	"	"	"	"	
Isopropylbenzene	ND	5.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.3	"	"	"	"	"	"	
Methylene chloride	ND	5.3	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
n-Propylbenzene	ND	5.3	"	"	"	"	"	"	
Styrene	ND	5.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
Tetrachloroethene	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.3	"	"	"	"	"	"	
Trichloroethene	ND	5.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
Vinyl chloride	ND	5.3	"	"	"	"	"	"	
Benzene	ND	5.3	"	"	"	"	"	"	
Toluene	ND	5.3	"	"	"	"	"	"	
Ethylbenzene	ND	5.3	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.3	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*126 %*	*77.8-142*		*"*	*"*	*"*	*"*	
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Phenol	ND	1000	"	"	"	"	"	"	
Aniline	ND	300	"	"	"	"	"	"	
2-Chlorophenol	ND	1000	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	300	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	300	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	300	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1000	"	"	"	"	"	"	
2-Methylnaphthalene	ND	300	"	"	"	"	"	"	
1-Methylnaphthalene	ND	300	"	"	"	"	"	"	
Acenaphthene	ND	300	"	"	"	"	"	"	
4-Nitrophenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	300	"	"	"	"	"	"	
Pentachlorophenol	ND	1000	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Benzyl alcohol	ND	300	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	300	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	300	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

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T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Bromophenyl phenyl ether	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Butyl benzyl phthalate	ND	300	"	"	"	"	"	"	
4-Chloroaniline	ND	300	"	"	"	"	"	"	
2-Chloronaphthalene	ND	300	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Dibenzofuran	ND	300	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	300	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	300	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	300	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1000	"	"	"	"	"	"	
Diethyl phthalate	ND	300	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1000	"	"	"	"	"	"	
Dimethyl phthalate	ND	300	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1000	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1000	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1000	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Hexachlorobenzene	ND	1500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	300	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1000	"	"	"	"	"	"	
Hexachloroethane	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Isophorone	ND	300	"	"	"	"	"	"	
2-Methylphenol	ND	1000	"	"	"	"	"	"	
4-Methylphenol	ND	1000	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
2-Nitroaniline	ND	300	"	"	"	"	"	"	
3-Nitroaniline	ND	300	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

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T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
4-Nitroaniline	ND	300	ug/kg	1	8092419	09/24/18	09/24/18	EPA 8270C	
Nitrobenzene	ND	1000	"	"	"	"	"	"	
2-Nitrophenol	ND	1000	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	300	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	300	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Azobenzene	ND	300	"	"	"	"	"	"	
Pyridine	ND	300	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1000	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1000	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*60.9 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*67.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*62.5 %*	*21.3-119*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*68.3 %*	*32.4-102*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*77.1 %*	*18.1-105*		"	"	"	"	
Surrogate: Terphenyl-dl4		*86.5 %*	*29.1-130*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	10	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	

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B4-5

T182898-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Indeno (1,2,3-cd) pyrene	ND	5.0	ug/kg	1	8092420	09/24/18	09/25/18	EPA 8270C SIM	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*101 %*		*18-137*	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
4-Bromofluorobenzene	**130**		ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
C6-C12 (GRO)	ND	370	"	"	"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*107 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**18**	5.0	"	"	"	"	"	"	
Barium	**73**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**38**	2.0	"	"	"	"	"	"	
Cobalt	**12**	2.0	"	"	"	"	"	"	
Copper	**30**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**24**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**58**	5.0	"	"	"	"	"	"	
Zinc	**54**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.8	ug/kg	1	8092008	09/20/18	09/27/18	EPA 8260B/5035	
Bromochloromethane	ND	5.8	"	"	"	"	"	"	
Bromodichloromethane	ND	5.8	"	"	"	"	"	"	
Bromoform	ND	5.8	"	"	"	"	"	"	
Bromomethane	ND	5.8	"	"	"	"	"	"	
n-Butylbenzene	ND	5.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.8	"	"	"	"	"	"	
Chlorobenzene	ND	5.8	"	"	"	"	"	"	
Chloroethane	ND	5.8	"	"	"	"	"	"	
Chloroform	ND	5.8	"	"	"	"	"	"	
Chloromethane	ND	5.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
Dibromochloromethane	ND	5.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.8	"	"	"	"	"	"	
Dibromomethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.8	ug/kg	1	8092008	09/20/18	09/27/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.8	"	"	"	"	"	"	
Isopropylbenzene	ND	5.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.8	"	"	"	"	"	"	
Methylene chloride	ND	5.8	"	"	"	"	"	"	
Naphthalene	ND	5.8	"	"	"	"	"	"	
n-Propylbenzene	ND	5.8	"	"	"	"	"	"	
Styrene	ND	5.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
Tetrachloroethene	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.8	"	"	"	"	"	"	
Trichloroethene	ND	5.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
Vinyl chloride	ND	5.8	"	"	"	"	"	"	
Benzene	ND	5.8	"	"	"	"	"	"	
Toluene	ND	5.8	"	"	"	"	"	"	
Ethylbenzene	ND	5.8	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	5.8	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-5.0(19)

T182898-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8092008*	*09/20/18*	*09/27/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*106 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
4-Bromofluorobenzene	**69**		ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
C6-C12 (GRO)	ND	430	"	"	"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*109 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	**11**	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**12**	5.0	"	"	"	"	"	"	
Barium	**56**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**35**	2.0	"	"	"	"	"	"	
Cobalt	**10**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Lead	**6.3**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**22**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**49**	5.0	"	"	"	"	"	"	
Zinc	**46**	1.0	"	"	"	"	"	"	

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B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.0	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
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B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.0	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-10.0(24)

T182898-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*105 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*105 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*121 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
4-Bromofluorobenzene	**73**		ug/kg	1	8092009	09/20/18	09/21/18	EPA 8015B/5035	
C6-C12 (GRO)	ND	560	"	"	"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8092025	09/20/18	09/22/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*106 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8092421	09/24/18	09/25/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**8.3**	5.0	"	"	"	"	"	"	
Barium	**41**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**23**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**15**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**18**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**33**	5.0	"	"	"	"	"	"	
Zinc	**27**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8092020	09/20/18	09/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.4	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
Bromochloromethane	ND	5.4	"	"	"	"	"	"	
Bromodichloromethane	ND	5.4	"	"	"	"	"	"	
Bromoform	ND	5.4	"	"	"	"	"	"	
Bromomethane	ND	5.4	"	"	"	"	"	"	
n-Butylbenzene	ND	5.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.4	"	"	"	"	"	"	
Chlorobenzene	ND	5.4	"	"	"	"	"	"	
Chloroethane	ND	5.4	"	"	"	"	"	"	
Chloroform	ND	5.4	"	"	"	"	"	"	
Chloromethane	ND	5.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.4	"	"	"	"	"	"	
Dibromochloromethane	ND	5.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.4	"	"	"	"	"	"	
Dibromomethane	ND	5.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.4	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.4	ug/kg	1	8092008	09/20/18	09/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.4	"	"	"	"	"	"	
Isopropylbenzene	ND	5.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.4	"	"	"	"	"	"	
Methylene chloride	ND	5.4	"	"	"	"	"	"	
Naphthalene	ND	5.4	"	"	"	"	"	"	
n-Propylbenzene	ND	5.4	"	"	"	"	"	"	
Styrene	ND	5.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.4	"	"	"	"	"	"	
Tetrachloroethene	ND	5.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.4	"	"	"	"	"	"	
Trichloroethene	ND	5.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.4	"	"	"	"	"	"	
Vinyl chloride	ND	5.4	"	"	"	"	"	"	
Benzene	ND	5.4	"	"	"	"	"	"	
Toluene	ND	5.4	"	"	"	"	"	"	
Ethylbenzene	ND	5.4	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.4	"	"	"	"	"	"	

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B63-15.0(29)

T182898-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*	*76.1-127*		*8092008*	*09/20/18*	*09/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*127 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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T182898-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**10**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**3.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*83.7 %*	*35-140*		"	"	"	"	

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B63-1.5

T182898-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**23**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*85.0 %*	*35-140*		"	"	"	"	

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B63-2.5

T182898-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*84.0 %*	*35-140*		"	"	"	"	

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B66-0.5

T182898-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**25**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*87.5 %*	*35-140*		"	"	"	"	

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B66-1.5

T182898-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*78.6 %*	*35-140*		"	"	"	"	

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B66-2.5

T182898-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*91.1 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B71-0.5

T182898-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*85.4 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B64-0.5

T182898-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**21**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.6 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*85.7 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B64-1.5

T182898-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.7 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*73.6 %*	*35-140*		"	"	"	"	

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B64-2.5

T182898-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**3.3**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	**6.6**	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*79.8 %*	*35-140*		"	"	"	"	

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B73-0.5

T182898-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**6.5**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.9 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*84.4 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B73-1.5

T182898-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*83.4 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B73-2.5

T182898-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*74.3 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B74-0.5

T182898-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**11**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**9.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*81.4 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B74-1.5

T182898-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*76.4 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B74-2.5

T182898-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*54.9 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*64.6 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B48-0.5

T182898-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*74.6 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B48-1.5

T182898-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.7 %*	*35-140*		"	"	"	"	

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B48-2.5

T182898-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8092010	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*60.6 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*71.1 %*	*35-140*		"	"	"	"	

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B18-0.5

T182898-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**24**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**26**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092014	09/20/18	09/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*65.8 %*	*35-140*		"	"	"	"	

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B18-1.5

T182898-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**6.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092104	09/21/18	09/24/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.6 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*68.6 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

B18-2.5

T182898-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**63**	0.25	mg/kg	1	8092011	09/20/18	09/25/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
STLC Metals by 6000/7000 Series Methods									
Arsenic	**0.38**	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8092104	09/21/18	09/24/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.3 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	**73**	50	ug/l	1	8092114	09/21/18	09/24/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*94.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8092417	09/24/18	09/26/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8092013	09/20/18	09/26/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	"	"	
Cadmium	ND	50	"	"	"	"	"	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	0.0020	ug/l	1	8092012	09/20/18	09/25/18	6020 ICP-MS	
Lead	**0.038**	0.0040	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8092024	09/20/18	09/24/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8092023	09/20/18	09/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*58.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*75.6 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8092002	09/20/18	09/21/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8092002	09/20/18	09/21/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**47**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*	*92.6-108*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Carbazole	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
Phenol	ND	10	"	"	"	"	"	"	
Aniline	ND	10	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
Acenaphthylene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	20	"	"	"	"	"	"	
1-Methylnaphthalene	ND	10	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10	"	"	"	"	"	"	
Acenaphthene	ND	10	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	20	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Benzyl alcohol	ND	50	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	20	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	20	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	20	"	"	"	"	"	"	

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EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Chrysene	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	20	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
Diethyl phthalate	ND	10	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	10	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	5.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	20	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	20	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	20	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	10	"	"	"	"	"	"	
2-Methylphenol	ND	10	"	"	"	"	"	"	
4-Methylphenol	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	20	"	"	"	"	"	"	
2-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	25	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Semivolatile Organic Compounds by EPA Method 8270C									
Phenanthrene	ND	10	ug/l	1	8092026	09/20/18	09/24/18	EPA 8270C	
2,4,5-Trichlorophenol	ND	20	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
2,3,5,6-Tetrachlorophenol	ND	10	"	"	"	"	"	"	
1,4-Dinitrobenzene	ND	10	"	"	"	"	"	"	
Pyridine	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*58.2 %*	*15-121*		"	"	"	"	
Surrogate: Phenol-d6		*52.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*76.8 %*	*14.7-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*86.1 %*	*33.3-110*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*91.0 %*	*12.9-110*		"	"	"	"	
Surrogate: Terphenyl-dl4		*93.9 %*	*15.8-136*		"	"	"	"	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring									
Acenaphthene	ND	1.00	ug/l	1	8092027	09/20/18	09/24/18	EPA 8270C SIM	
Acenaphthylene	ND	1.00	"	"	"	"	"	"	
Anthracene	ND	1.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	1.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	1.00	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	1.00	"	"	"	"	"	"	
Chrysene	ND	1.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	1.00	"	"	"	"	"	"	
Fluoranthene	ND	1.00	"	"	"	"	"	"	
Fluorene	ND	1.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	1.00	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
Phenanthrene	ND	1.00	"	"	"	"	"	"	
Pyrene	ND	1.00	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*117 %*	*33-141*		"	"	"	"	

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Terraphase Engineering - Irvine	Project:	Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number:	[none]	**Reported:**
Irvine CA, 92612	Project Manager:	Clare Steedman	07/22/19 09:55

EB-03

T182898-29 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092009 - EPA 5035 GC										
Blank (8092009-BLK1)				Prepared & Analyzed: 09/20/18						
4-Bromofluorobenzene	104		ug/kg	100		104	65-135			
C6-C12 (GRO)	ND	500	"							
LCS (8092009-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
4-Bromofluorobenzene	106		ug/kg	100		106	65-135			
C6-C12 (GRO)	8480	500	"	11000		77.1	75-125			
LCS Dup (8092009-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
4-Bromofluorobenzene	117		ug/kg	100		117	65-135	10.3		
C6-C12 (GRO)	10100	500	"	11000		91.5	75-125	17.1	20	
Batch 8092114 - EPA 5030 GC										
Blank (8092114-BLK1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*82.0*		*"*	*100*		*82.0*	*65-135*			
LCS (8092114-BS1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	930	50	ug/l	996		93.4	75-125			
Surrogate: 4-Bromofluorobenzene	*97.0*		*"*	*100*		*97.0*	*65-135*			
LCS Dup (8092114-BSD1)				Prepared: 09/21/18 Analyzed: 09/24/18						
C6-C12 (GRO)	987	50	ug/l	996		99.1	75-125	5.95	20	
Surrogate: 4-Bromofluorobenzene	*90.4*		*"*	*100*		*90.4*	*65-135*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092025 - EPA 3550B GC										
Blank (8092025-BLK1)				Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*99.6*		*"*	*100*		*99.6*	*65-135*			
LCS (8092025-BS1)				Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	560	10	mg/kg	500		112	75-125			
Surrogate: p-Terphenyl	*98.8*		*"*	*100*		*98.8*	*65-135*			
Matrix Spike (8092025-MS1)		**Source: T182898-02**		Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	530	10	mg/kg	500	ND	107	75-125			
Surrogate: p-Terphenyl	*94.3*		*"*	*100*		*94.3*	*65-135*			
Matrix Spike Dup (8092025-MSD1)		**Source: T182898-02**		Prepared: 09/20/18 Analyzed: 09/22/18						
C13-C28 (DRO)	590	10	mg/kg	490	ND	121	75-125	10.9	20	
Surrogate: p-Terphenyl	*105*		*"*	*98.0*		*107*	*65-135*			
Batch 8092417 - EPA 3510C GC										
Blank (8092417-BLK1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*3.86*		*"*	*4.00*		*96.4*	*65-135*			
LCS (8092417-BS1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	16.8	0.50	mg/l	20.0		83.8	75-125			
Surrogate: p-Terphenyl	*3.83*		*"*	*4.00*		*95.7*	*65-135*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092417 - EPA 3510C GC										
LCS Dup (8092417-BSD1)				Prepared: 09/24/18 Analyzed: 09/26/18						
C13-C28 (DRO)	17.0	0.50	mg/l	20.0		84.9	75-125	1.31	20	
Surrogate: p-Terphenyl	*3.82*		*"*	*4.00*		*95.5*	*65-135*			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092013 - EPA 3010A										
Blank (8092013-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8092013-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	486	50	ug/l	500		97.2	75-125			
Barium	515	50	"	500		103	75-125			
Cadmium	504	50	"	500		101	75-125			
Chromium	512	50	"	500		102	75-125			
Lead	523	50	"	500		105	75-125			
Matrix Spike (8092013-MS1)	**Source: T182898-29**			Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	505	50	ug/l	500	ND	101	75-125			
Barium	487	50	"	500	ND	97.3	75-125			
Cadmium	474	50	"	500	ND	94.8	75-125			
Chromium	484	50	"	500	ND	96.7	75-125			
Lead	495	50	"	500	ND	99.0	75-125			

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092013 - EPA 3010A										
Matrix Spike Dup (8092013-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/21/18						
Arsenic	491	50	ug/l	500	ND	98.1	75-125	2.92	20	
Barium	498	50	"	500	ND	99.6	75-125	2.37	20	
Cadmium	489	50	"	500	ND	97.9	75-125	3.13	20	
Chromium	495	50	"	500	ND	99.0	75-125	2.34	20	
Lead	513	50	"	500	ND	103	75-125	3.54	20	
Batch 8092421 - EPA 3050B										
Blank (8092421-BLK1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8092421-BS1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	106	5.0	mg/kg	100		106	75-125			
Barium	106	1.0	"	100		106	75-125			
Cadmium	106	2.0	"	100		106	75-125			
Chromium	106	2.0	"	100		106	75-125			
Lead	104	3.0	"	100		104	75-125			

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092421 - EPA 3050B										
Matrix Spike (8092421-MS1)		**Source: T182898-01**		Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	126	5.0	mg/kg	99.0	22.8	104	75-125			
Barium	285	1.0	"	99.0	204	81.7	75-125			
Cadmium	112	2.0	"	99.0	ND	113	75-125			
Chromium	147	2.0	"	99.0	42.5	106	75-125			
Lead	107	3.0	"	99.0	13.4	94.7	75-125			
Matrix Spike Dup (8092421-MSD1)		**Source: T182898-01**		Prepared: 09/24/18 Analyzed: 09/25/18						
Arsenic	128	5.0	mg/kg	98.0	22.8	107	75-125	1.57	20	
Barium	296	1.0	"	98.0	204	94.0	75-125	3.86	20	
Cadmium	110	2.0	"	98.0	ND	113	75-125	1.33	20	
Chromium	148	2.0	"	98.0	42.5	108	75-125	0.584	20	
Lead	108	3.0	"	98.0	13.4	96.3	75-125	0.632	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092010 - EPA 3051										
Blank (8092010-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8092010-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	24.3	0.25	mg/kg	25.0		97.2	80-120			
Lead	24.6	0.25	"	25.0		98.5	80-120			
Matrix Spike (8092010-MS1)		**Source: T182898-07**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	35.1	0.25	mg/kg	25.0	10.3	99.1	75-125			
Lead	30.6	0.25	"	25.0	3.73	107	75-125			
Matrix Spike (8092010-MS2)		**Source: T182898-08**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	58.9	0.25	mg/kg	25.0	22.6	145	75-125			QM-05
Lead	45.3	0.25	"	25.0	6.53	155	75-125			QM-05
Matrix Spike Dup (8092010-MSD1)		**Source: T182898-07**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	47.2	0.25	mg/kg	25.0	10.3	147	75-125	29.4	20	QR-04
Lead	37.0	0.25	"	25.0	3.73	133	75-125	19.1	20	QR-04
Batch 8092011 - EPA 3051										
Blank (8092011-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Manganese	ND	0.25	mg/kg							
Antimony	ND	0.25	"							
Arsenic	ND	0.25	"							
Barium	ND	0.25	"							
Beryllium	ND	0.25	"							
Cadmium	ND	0.25	"							
Chromium	ND	0.25	"							
Cobalt	ND	0.25	"							
Copper	ND	0.25	"							
Lead	ND	0.25	"							
Mercury	ND	0.025	"							
Molybdenum	ND	0.25	"							
Nickel	ND	0.25	"							
Selenium	ND	1.2	"							
Silver	ND	0.25	"							
Thallium	ND	0.25	"							

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092011 - EPA 3051										
Blank (8092011-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Vanadium	ND	0.25	mg/kg							
Zinc	ND	0.25	"							
LCS (8092011-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	24.5	0.25	mg/kg	25.0		97.8	80-120			
Lead	24.5	0.25	"	25.0		98.1	80-120			
Duplicate (8092011-DUP1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	25.1	1.2	mg/kg		23.7			6.05	20	
Lead	27.2	1.2	"		25.9			5.03	20	
Matrix Spike (8092011-MS1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	41.9	0.25	mg/kg	25.0	23.7	73.0	75-125			QR-04
Lead	48.5	0.25	"	25.0	25.9	90.3	75-125			
Matrix Spike Dup (8092011-MSD1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	44.9	0.25	mg/kg	25.0	23.7	85.1	75-125	6.97	20	
Lead	45.4	0.25	"	25.0	25.9	78.2	75-125	6.43	20	
Post Spike (8092011-PS1)		**Source: T182898-26**		Prepared: 09/20/18 Analyzed: 09/25/18						
Barium	147		mg/kg	25.0	111	144	80-120			QM-PS
Chromium	55.0		"	25.0	89.7	NR	80-120			QM-05
Batch 8092012 - EPA 3010A										
Blank (8092012-BLK1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	ND	0.0020	ug/l							
Lead	ND	0.0040	"							

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092012 - EPA 3010A										
LCS (8092012-BS1)				Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	51.2	0.0020	ug/l	50.0		102	80-120			
Lead	49.9	0.0040	"	50.0		99.8	80-120			
Matrix Spike (8092012-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	48.1	0.0020	ug/l	50.0	ND	96.2	75-125			
Lead	47.6	0.0040	"	50.0	0.0380	95.1	75-125			
Matrix Spike Dup (8092012-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/25/18						
Arsenic	51.0	0.0020	ug/l	50.0	ND	102	75-125	5.84	20	
Lead	50.0	0.0040	"	50.0	0.0380	100	75-125	5.04	20	

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STLC Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8111923 - STLC Metals										
Blank (8111923-BLK1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	ND	0.10	mg/l							
Arsenic	ND	0.10	"							
LCS (8111923-BS1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	9.57	0.10	mg/l	10.0		95.7	75-125			
Arsenic	10.9	0.10	"	10.0		109	75-125			
Matrix Spike (8111923-MS1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.4	0.10	mg/l	10.0	3.56	88.2	75-125			
Arsenic	10.1	0.10	"	10.0	0.846	92.5	75-125			
Matrix Spike Dup (8111923-MSD1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.6	0.10	mg/l	10.0	3.56	90.3	75-125	1.64	30	
Arsenic	10.8	0.10	"	10.0	0.846	99.4	75-125	6.61	30	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092020 - EPA 7471A Soil										
Blank (8092020-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	ND	0.10	mg/kg							
LCS (8092020-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.355	0.10	mg/kg	0.410		86.7	80-120			
Matrix Spike (8092020-MS1)		**Source: T182898-01**		Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.358	0.10	mg/kg	0.397	ND	90.1	75-125			
Matrix Spike Dup (8092020-MSD1)		**Source: T182898-01**		Prepared: 09/20/18 Analyzed: 09/21/18						
Mercury	0.356	0.10	mg/kg	0.403	ND	88.3	75-125	0.508	20	
Batch 8092024 - EPA 7470A Water										
Blank (8092024-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	ND	0.50	ug/l							
LCS (8092024-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	4.11	0.50	ug/l	5.00		82.1	80-120			
Matrix Spike (8092024-MS1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	3.98	0.50	ug/l	5.00	ND	79.5	75-125			
Matrix Spike Dup (8092024-MSD1)		**Source: T182898-29**		Prepared: 09/20/18 Analyzed: 09/24/18						
Mercury	4.01	0.50	ug/l	5.00	ND	80.2	75-125	0.890	20	

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18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092014 - EPA 3550 ECD/GCMS										
Blank (8092014-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.06*		*"*	*9.80*		*72.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.03*		*"*	*9.80*		*81.9*	*35-140*			
LCS (8092014-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
gamma-BHC (Lindane)	29.8	5.0	ug/kg	39.2		76.1	40-120			
Heptachlor	28.9	5.0	"	39.2		73.8	40-120			
Aldrin	32.2	5.0	"	39.2		82.1	40-120			
Dieldrin	32.1	5.0	"	39.2		81.8	40-120			
Endrin	25.1	5.0	"	39.2		64.0	40-120			
4,4´-DDT	19.9	5.0	"	39.2		50.7	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.33*		*"*	*9.80*		*74.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.43*		*"*	*9.80*		*86.0*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092014 - EPA 3550 ECD/GCMS										
LCS Dup (8092014-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
gamma-BHC (Lindane)	31.1	5.0	ug/kg	39.2		79.3	40-120	4.13	30	
Heptachlor	30.3	5.0	"	39.2		77.3	40-120	4.64	30	
Aldrin	33.0	5.0	"	39.2		84.1	40-120	2.41	30	
Dieldrin	33.4	5.0	"	39.2		85.2	40-120	4.07	30	
Endrin	26.1	5.0	"	39.2		66.5	40-120	3.89	30	
4,4′-DDT	21.3	5.0	"	39.2		54.4	33-147	7.17	30	
Surrogate: Tetrachloro-meta-xylene	*7.22*		*"*	*9.80*		*73.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.52*		*"*	*9.80*		*87.0*	*35-140*			
Batch 8092023 - EPA 3510C GCMS/ECD										
Blank (8092023-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4′-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4′-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4′-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*64.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.816*		*"*	*1.00*		*81.6*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092023 - EPA 3510C GCMS/ECD										
LCS (8092023-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.30	1.00	ug/l	4.00		57.4	40-120			
Heptachlor	2.42	1.00	"	4.00		60.6	40-120			
Aldrin	2.04	1.00	"	4.00		51.0	40-120			
Dieldrin	2.58	1.00	"	4.00		64.5	40-120			
Endrin	2.58	1.00	"	4.00		64.6	40-120			
4,4´-DDT	2.41	2.00	"	4.00		60.4	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.508*		*"*	*1.00*		*50.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.684*		*"*	*1.00*		*68.4*	*35-140*			
Matrix Spike (8092023-MS1)		**Source: T182893-01**		Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.46	1.00	ug/l	4.00	ND	61.5	20-120			
Heptachlor	2.65	1.00	"	4.00	ND	66.2	20-120			
Aldrin	2.35	1.00	"	4.00	ND	58.7	20-120			
Dieldrin	2.69	1.00	"	4.00	ND	67.3	20-120			
Endrin	2.69	1.00	"	4.00	ND	67.2	20-120			
4,4´-DDT	2.57	2.00	"	4.00	ND	64.3	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.576*		*"*	*1.00*		*57.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.734*		*"*	*1.00*		*73.4*	*35-140*			
Matrix Spike Dup (8092023-MSD1)		**Source: T182893-01**		Prepared: 09/20/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	2.48	1.00	ug/l	4.00	ND	62.0	20-120	0.774	30	
Heptachlor	2.61	1.00	"	4.00	ND	65.3	20-120	1.31	30	
Aldrin	2.31	1.00	"	4.00	ND	57.7	20-120	1.69	30	
Dieldrin	2.72	1.00	"	4.00	ND	68.1	20-120	1.15	30	
Endrin	2.74	1.00	"	4.00	ND	68.6	20-120	2.06	30	
4,4´-DDT	2.62	2.00	"	4.00	ND	65.6	20-120	2.02	30	
Surrogate: Tetrachloro-meta-xylene	*0.517*		*"*	*1.00*		*51.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.682*		*"*	*1.00*		*68.2*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092104 - EPA 3550 ECD/GCMS										
Blank (8092104-BLK1)				Prepared: 09/21/18 Analyzed: 09/24/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.32*		*"*	*10.0*		*73.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.41*		*"*	*10.0*		*74.1*	*35-140*			
LCS (8092104-BS1)				Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	31.2	5.0	ug/kg	40.0		78.0	40-120			
Heptachlor	31.2	5.0	"	40.0		78.1	40-120			
Aldrin	30.3	5.0	"	40.0		75.7	40-120			
Dieldrin	30.8	5.0	"	40.0		77.0	40-120			
Endrin	30.5	5.0	"	40.0		76.3	40-120			
4,4´-DDT	21.0	5.0	"	40.0		52.5	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.38*		*"*	*10.0*		*73.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.75*		*"*	*10.0*		*77.5*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092104 - EPA 3550 ECD/GCMS										
Matrix Spike (8092104-MS1)		**Source: T182894-05**		Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	30.6	5.0	ug/kg	40.4	ND	75.8	30-120			
Heptachlor	31.7	5.0	"	40.4	ND	78.4	30-120			
Aldrin	30.7	5.0	"	40.4	ND	75.9	30-120			
Dieldrin	26.7	5.0	"	40.4	ND	66.1	30-120			
Endrin	26.2	5.0	"	40.4	ND	64.8	30-120			
4,4´-DDT	37.9	5.0	"	40.4	6.38	78.0	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.51*		*"*	*10.1*		*74.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.08*		*"*	*10.1*		*80.0*	*35-140*			
Matrix Spike Dup (8092104-MSD1)		**Source: T182894-05**		Prepared: 09/21/18 Analyzed: 09/24/18						
gamma-BHC (Lindane)	27.4	5.0	ug/kg	40.0	ND	68.5	30-120	10.1	30	
Heptachlor	28.3	5.0	"	40.0	ND	70.8	30-120	10.2	30	
Aldrin	27.8	5.0	"	40.0	ND	69.5	30-120	8.85	30	
Dieldrin	22.8	5.0	"	40.0	ND	57.0	30-120	14.9	30	
Endrin	22.4	5.0	"	40.0	ND	56.0	30-120	14.5	30	
4,4´-DDT	33.5	5.0	"	40.0	6.38	67.8	30-120	13.9	30	
Surrogate: Tetrachloro-meta-xylene	*6.79*		*"*	*10.0*		*67.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.14*		*"*	*10.0*		*71.4*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
Blank (8092002-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
Blank (8092002-BLK1)				Prepared: 09/20/18 Analyzed: 09/21/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.2*		*"*	*20.0*		*96.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.1*		*"*	*20.0*		*100*	*71.5-128*			
Surrogate: Toluene-d8	*19.9*		*"*	*20.0*		*99.3*	*92.6-108*			
LCS (8092002-BS1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Chlorobenzene	17.1	1.0	ug/l	20.0		85.6	79.3-117			
1,1-Dichloroethene	15.2	1.0	"	20.0		76.0	68.3-130			
Trichloroethene	16.6	1.0	"	20.0		82.8	82.4-119			
Benzene	17.3	0.50	"	20.0		86.5	79.9-118			
Toluene	16.8	0.50	"	20.0		84.0	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.4*		*"*	*20.0*		*97.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.5*		*"*	*20.0*		*103*	*71.5-128*			
Surrogate: Toluene-d8	*20.4*		*"*	*20.0*		*102*	*92.6-108*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092002 - EPA 5030 GCMS										
LCS Dup (8092002-BSD1)				Prepared: 09/20/18 Analyzed: 09/21/18						
Chlorobenzene	18.8	1.0	ug/l	20.0		94.2	79.3-117	9.62	20	
1,1-Dichloroethene	17.2	1.0	"	20.0		85.9	68.3-130	12.2	20	
Trichloroethene	17.8	1.0	"	20.0		89.0	82.4-119	7.22	20	
Benzene	18.9	0.50	"	20.0		94.6	79.9-118	9.00	20	
Toluene	18.5	0.50	"	20.0		92.4	78.7-116	9.47	20	
Surrogate: 4-Bromofluorobenzene	*19.6*		*"*	*20.0*		*98.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.8*		*"*	*20.0*		*104*	*71.5-128*			
Surrogate: Toluene-d8	*20.1*		*"*	*20.0*		*100*	*92.6-108*			
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	9.9	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	9.9	"							
o-Xylene	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092008 - EPA 5035 GCMS										
Blank (8092008-BLK1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Surrogate: Toluene-d8	*41.4*		*ug/kg*	*39.7*		*104*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.8*		*"*	*39.7*		*103*	*85.9-114*			
Surrogate: Dibromofluoromethane	*48.1*		*"*	*39.7*		*121*	*77.8-142*			
LCS (8092008-BS1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Chlorobenzene	30.5	5.0	ug/kg	39.7		77.0	75-125			
1,1-Dichloroethene	34.5	5.0	"	39.7		86.9	75-125			
Trichloroethene	30.9	5.0	"	39.7		78.0	75-125			
Benzene	37.2	5.0	"	39.7		93.8	75-125			
Toluene	33.0	5.0	"	39.7		83.0	75-125			
Surrogate: Toluene-d8	*38.8*		*"*	*39.7*		*97.9*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*37.8*		*"*	*39.7*		*95.2*	*85.9-114*			
Surrogate: Dibromofluoromethane	*50.8*		*"*	*39.7*		*128*	*77.8-142*			
LCS Dup (8092008-BSD1)				Prepared: 09/20/18 Analyzed: 09/26/18						
Chlorobenzene	32.0	5.0	ug/kg	39.7		80.6	75-125	4.63	20	
1,1-Dichloroethene	35.4	5.0	"	39.7		89.3	75-125	2.73	20	
Trichloroethene	30.4	5.0	"	39.7		76.5	75-125	1.88	20	
Benzene	35.9	5.0	"	39.7		90.6	75-125	3.58	20	
Toluene	30.6	5.0	"	39.7		77.2	75-125	7.37	20	
Surrogate: Toluene-d8	*38.8*		*"*	*39.7*		*97.7*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*41.7*		*"*	*39.7*		*105*	*85.9-114*			
Surrogate: Dibromofluoromethane	*53.3*		*"*	*39.7*		*134*	*77.8-142*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Carbazole	ND	10	ug/l							
Aniline	ND	10	"							
Phenol	ND	10	"							
2-Chlorophenol	ND	10	"							
Acenaphthylene	ND	10	"							
1,4-Dichlorobenzene	ND	10	"							
Anthracene	ND	10	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1-Methylnaphthalene	ND	10	"							
4-Chloro-3-methylphenol	ND	10	"							
2-Methylnaphthalene	ND	20	"							
Benzo (a) anthracene	ND	10	"							
Acenaphthene	ND	10	"							
Benzo (b) fluoranthene	ND	10	"							
4-Nitrophenol	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
2,4-Dinitrotoluene	ND	10	"							
Pentachlorophenol	ND	10	"							
Benzo (g,h,i) perylene	ND	20	"							
Benzo (a) pyrene	ND	10	"							
Pyrene	ND	10	"							
Benzyl alcohol	ND	50	"							
Bis(2-chloroethoxy)methane	ND	10	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	20	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	10	"							
4-Chloroaniline	ND	20	"							
2-Chloronaphthalene	ND	10	"							
4-Chlorophenyl phenyl ether	ND	20	"							
Chrysene	ND	10	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	20	"							
Di-n-butyl phthalate	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
1,2-Dichlorobenzene	ND	5.0	ug/l							
1,3-Dichlorobenzene	ND	5.0	"							
2,4-Dichlorophenol	ND	10	"							
Diethyl phthalate	ND	10	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	10	"							
4,6-Dinitro-2-methylphenol	ND	5.0	"							
2,4-Dinitrophenol	ND	10	"							
2,6-Dinitrotoluene	ND	20	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Hexachlorobenzene	ND	20	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	20	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	10	"							
2-Methylphenol	ND	10	"							
4-Methylphenol	ND	20	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	20	"							
2-Nitrophenol	ND	10	"							
N-Nitrosodiphenylamine	ND	10	"							
N-Nitrosodimethylamine	ND	25	"							
Phenanthrene	ND	10	"							
2,4,5-Trichlorophenol	ND	20	"							
2,4,6-Trichlorophenol	ND	10	"							
2,3,4,6-Tetrachlorophenol	ND	10	"							
2,3,5,6-Tetrachlorophenol	ND	10	"							
1,4-Dinitrobenzene	ND	10	"							
Pyridine	ND	10	"							

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Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
Blank (8092026-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Surrogate: 2-Fluorophenol	*88.9*		*ug/l*	*200*		*44.5*	*15-121*			
Surrogate: Phenol-d6	*80.4*		*"*	*200*		*40.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*123*		*"*	*200*		*61.7*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*147*		*"*	*200*		*73.6*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*159*		*"*	*200*		*79.6*	*12.9-110*			
Surrogate: Terphenyl-dl4	*168*		*"*	*200*		*84.2*	*15.8-136*			
LCS (8092026-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Phenol	76.9	10	ug/l	200		38.4	12-89			
2-Chlorophenol	119	10	"	200		59.3	40-120			
1,4-Dichlorobenzene	105	10	"	200		52.7	33-94			
N-Nitrosodi-n-propylamine	128	5.0	"	200		64.0	40-120			
1,2,4-Trichlorobenzene	126	5.0	"	200		63.1	40-120			
4-Chloro-3-methylphenol	134	10	"	200		67.1	50-130			
Acenaphthene	148	10	"	200		74.0	50-130			
4-Nitrophenol	107	10	"	200		53.6	10-80			
2,4-Dinitrotoluene	146	10	"	200		73.0	24-96			
Pentachlorophenol	188	10	"	200		94.1	50-130			
Pyrene	162	10	"	200		80.9	26-127			
Surrogate: 2-Fluorophenol	*88.8*		*"*	*200*		*44.4*	*15-121*			
Surrogate: Phenol-d6	*81.0*		*"*	*200*		*40.5*	*24-113*			
Surrogate: Nitrobenzene-d5	*130*		*"*	*200*		*65.1*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*157*		*"*	*200*		*78.5*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*170*		*"*	*200*		*84.9*	*12.9-110*			
Surrogate: Terphenyl-dl4	*183*		*"*	*200*		*91.4*	*15.8-136*			
LCS Dup (8092026-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Phenol	95.3	10	ug/l	200		47.6	12-89	21.3	42	
2-Chlorophenol	136	10	"	200		68.0	40-120	13.8	40	
1,4-Dichlorobenzene	124	10	"	200		61.8	33-94	16.0	28	
N-Nitrosodi-n-propylamine	148	5.0	"	200		74.2	40-120	14.8	38	
1,2,4-Trichlorobenzene	134	5.0	"	200		66.9	40-120	5.85	28	
4-Chloro-3-methylphenol	148	10	"	200		74.1	50-130	10.0	42	
Acenaphthene	161	10	"	200		80.5	50-130	8.40	31	
4-Nitrophenol	106	10	"	200		52.8	10-80	1.60	50	
2,4-Dinitrotoluene	158	10	"	200		79.0	24-96	7.90	38	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092026 - EPA 3510C GCMS/ECD										
LCS Dup (8092026-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Pentachlorophenol	217	10	ug/l	200		108	50-130	14.1	50	
Pyrene	172	10	"	200		86.1	26-127	6.28	31	
Surrogate: 2-Fluorophenol	*103*		*"*	*200*		*51.6*	*15-121*			
Surrogate: Phenol-d6	*98.1*		*"*	*200*		*49.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*142*		*"*	*200*		*70.9*	*14.7-110*			
Surrogate: 2-Fluorobiphenyl	*169*		*"*	*200*		*84.4*	*33.3-110*			
Surrogate: 2,4,6-Tribromophenol	*184*		*"*	*200*		*91.8*	*12.9-110*			
Surrogate: Terphenyl-dl4	*189*		*"*	*200*		*94.5*	*15.8-136*			
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Carbazole	ND	300	ug/kg							
Aniline	ND	300	"							
Phenol	ND	1000	"							
2-Chlorophenol	ND	1000	"							
1,4-Dichlorobenzene	ND	300	"							
N-Nitrosodi-n-propylamine	ND	300	"							
1,2,4-Trichlorobenzene	ND	300	"							
4-Chloro-3-methylphenol	ND	1000	"							
2-Methylnaphthalene	ND	300	"							
1-Methylnaphthalene	ND	300	"							
Acenaphthene	ND	300	"							
4-Nitrophenol	ND	1000	"							
2,4-Dinitrotoluene	ND	300	"							
Pentachlorophenol	ND	1000	"							
Pyrene	ND	300	"							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Benzyl alcohol	ND	300	"							
Bis(2-chloroethoxy)methane	ND	300	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Bis(2-chloroethyl)ether	ND	300	ug/kg							
Bis(2-chloroisopropyl)ether	ND	300	"							
Bis(2-ethylhexyl)phthalate	ND	300	"							
4-Bromophenyl phenyl ether	ND	300	"							
Butyl benzyl phthalate	ND	300	"							
4-Chloroaniline	ND	300	"							
2-Chloronaphthalene	ND	300	"							
4-Chlorophenyl phenyl ether	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Dibenzofuran	ND	300	"							
Di-n-butyl phthalate	ND	300	"							
1,2-Dichlorobenzene	ND	300	"							
1,3-Dichlorobenzene	ND	300	"							
2,4-Dichlorophenol	ND	1000	"							
Diethyl phthalate	ND	300	"							
2,4-Dimethylphenol	ND	1000	"							
Dimethyl phthalate	ND	300	"							
4,6-Dinitro-2-methylphenol	ND	1000	"							
2,4-Dinitrophenol	ND	1000	"							
2,6-Dinitrotoluene	ND	1000	"							
Di-n-octyl phthalate	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Hexachlorobenzene	ND	1500	"							
Hexachlorobutadiene	ND	300	"							
Hexachlorocyclopentadiene	ND	1000	"							
Hexachloroethane	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Isophorone	ND	300	"							
2-Methylphenol	ND	1000	"							
4-Methylphenol	ND	1000	"							
Naphthalene	ND	300	"							
2-Nitroaniline	ND	300	"							
3-Nitroaniline	ND	300	"							
4-Nitroaniline	ND	300	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
Blank (8092419-BLK1)				Prepared & Analyzed: 09/24/18						
Nitrobenzene	ND	1000	ug/kg							
2-Nitrophenol	ND	1000	"							
N-Nitrosodimethylamine	ND	300	"							
N-Nitrosodiphenylamine	ND	300	"							
2,3,5,6-Tetrachlorophenol	ND	300	"							
2,3,4,6-Tetrachlorophenol	ND	300	"							
Phenanthrene	ND	300	"							
Azobenzene	ND	300	"							
Pyridine	ND	300	"							
2,4,5-Trichlorophenol	ND	1000	"							
2,4,6-Trichlorophenol	ND	1000	"							
Surrogate: 2-Fluorophenol	*2000*		*"*	*3310*		*60.4*	*15-121*			
Surrogate: Phenol-d6	*2270*		*"*	*3310*		*68.4*	*24-113*			
Surrogate: Nitrobenzene-d5	*2030*		*"*	*3310*		*61.4*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2510*		*"*	*3310*		*75.9*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2680*		*"*	*3310*		*81.1*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3210*		*"*	*3310*		*96.9*	*29.1-130*			
LCS (8092419-BS1)				Prepared & Analyzed: 09/24/18						
Phenol	2150	1000	ug/kg	3380		63.8	34-114			
2-Chlorophenol	2270	1000	"	3380		67.2	34-114			
1,4-Dichlorobenzene	2140	300	"	3380		63.2	34-114			
N-Nitrosodi-n-propylamine	2280	300	"	3380		67.4	30-110			
1,2,4-Trichlorobenzene	2220	300	"	3380		65.6	39-119			
4-Chloro-3-methylphenol	2560	1000	"	3380		75.8	50-130			
Acenaphthene	2580	300	"	3380		76.3	34-114			
Pentachlorophenol	3490	1000	"	3380		103	50-130			
Pyrene	2760	300	"	3380		81.7	30-110			
Surrogate: 2-Fluorophenol	*2140*		*"*	*3380*		*63.3*	*15-121*			
Surrogate: Phenol-d6	*2300*		*"*	*3380*		*68.0*	*24-113*			
Surrogate: Nitrobenzene-d5	*2200*		*"*	*3380*		*65.2*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2610*		*"*	*3380*		*77.4*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2820*		*"*	*3380*		*83.5*	*18.1-105*			
Surrogate: Terphenyl-dl4	*3260*		*"*	*3380*		*96.6*	*29.1-130*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092419 - EPA 3550 ECD/GCMS										
LCS Dup (8092419-BSD1)				Prepared & Analyzed: 09/24/18						
Phenol	2310	1000	ug/kg	3370		68.7	34-114	7.13	42	
2-Chlorophenol	2340	1000	"	3370		69.4	34-114	2.87	40	
1,4-Dichlorobenzene	2160	300	"	3370		64.3	34-114	1.33	28	
N-Nitrosodi-n-propylamine	2320	300	"	3370		68.8	30-110	1.81	38	
1,2,4-Trichlorobenzene	2110	300	"	3370		62.6	39-119	5.02	28	
4-Chloro-3-methylphenol	2450	1000	"	3370		72.9	50-130	4.18	42	
Acenaphthene	2470	300	"	3370		73.3	34-114	4.36	31	
Pentachlorophenol	3140	1000	"	3370		93.4	50-130	10.5	50	
Pyrene	2520	300	"	3370		74.9	30-110	9.02	31	
Surrogate: 2-Fluorophenol	*2270*		*"*	*3370*		*67.4*	*15-121*			
Surrogate: Phenol-d6	*2430*		*"*	*3370*		*72.2*	*24-113*			
Surrogate: Nitrobenzene-d5	*2120*		*"*	*3370*		*62.9*	*21.3-119*			
Surrogate: 2-Fluorobiphenyl	*2360*		*"*	*3370*		*70.2*	*32.4-102*			
Surrogate: 2,4,6-Tribromophenol	*2600*		*"*	*3370*		*77.2*	*18.1-105*			
Surrogate: Terphenyl-dl4	*2880*		*"*	*3370*		*85.7*	*29.1-130*			

SunStar Laboratories, Inc.

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Jeff Lee For Kris Kubota, Project Manager Assistant

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Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092027 - EPA 3510C GCMS/ECD										
Blank (8092027-BLK1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	ND	1.00	ug/l							
Acenaphthylene	ND	1.00	"							
Anthracene	ND	1.00	"							
Benzo (a) anthracene	ND	1.00	"							
Benzo (b) fluoranthene	ND	1.00	"							
Benzo (k) fluoranthene	ND	1.00	"							
Benzo (g,h,i) perylene	ND	1.00	"							
Benzo (a) pyrene	ND	1.00	"							
Chrysene	ND	1.00	"							
Dibenz (a,h) anthracene	ND	1.00	"							
Fluoranthene	ND	1.00	"							
Fluorene	ND	1.00	"							
Indeno (1,2,3-cd) pyrene	ND	1.00	"							
Naphthalene	ND	1.00	"							
Phenanthrene	ND	1.00	"							
Pyrene	ND	1.00	"							
Surrogate: Terphenyl-dl4	*23.9*		*"*	*20.0*		*120*	*33-141*			
LCS (8092027-BS1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	16.8	1.00	ug/l	20.0		84.1	50-130			
Pyrene	19.4	1.00	"	20.0		96.9	50-130			
Surrogate: Terphenyl-dl4	*23.8*		*"*	*20.0*		*119*	*33-141*			
LCS Dup (8092027-BSD1)				Prepared: 09/20/18 Analyzed: 09/24/18						
Acenaphthene	16.6	1.00	ug/l	20.0		83.0	50-130	1.32	31	
Pyrene	19.5	1.00	"	20.0		97.7	50-130	0.822	31	
Surrogate: Terphenyl-dl4	*22.6*		*"*	*20.0*		*113*	*33-141*			

SunStar Laboratories, Inc.

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Jeff Lee For Kris Kubota, Project Manager Assistant

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8092420 - EPA 3550 ECD/GCMS										
Blank (8092420-BLK1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	ND	10	ug/kg							
Acenaphthylene	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
Benzo (g,h,i) perylene	ND	5.0	"							
Benzo (a) pyrene	ND	10	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	5.0	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	10	"							
Indeno (1,2,3-cd) pyrene	ND	5.0	"							
Naphthalene	ND	5.0	"							
Phenanthrene	ND	5.0	"							
Pyrene	ND	10	"							
Surrogate: Terphenyl-dl4	*357*		*"*	*329*		*109*	*18-137*			
LCS (8092420-BS1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	285	10	ug/kg	326		87.6	50-130			
Pyrene	339	10	"	326		104	50-130			
Surrogate: Terphenyl-dl4	*384*		*"*	*326*		*118*	*18-137*			
LCS Dup (8092420-BSD1)				Prepared: 09/24/18 Analyzed: 09/25/18						
Acenaphthene	316	10	ug/kg	338		93.5	50-130	10.2	31	
Pyrene	273	10	"	338		80.8	50-130	21.5	31	
Surrogate: Terphenyl-dl4	*364*		*"*	*338*		*108*	*18-137*			

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Jeff Lee For Kris Kubota, Project Manager Assistant

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Lake Forest, California 92630
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: [none]	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	07/22/19 09:55

Notes and Definitions

QR-04	The percent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-PS	The percent recovery and/or RPD are outside acceptance criteria. Results accepted based upon percent recovery results in the post spike and/or serial dilution.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

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Jeff Lee For Kris Kubota, Project Manager Assistant

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRA PHASE ENGINEERING INC
Address: 18409 VON KARMAN AVE IRVINE CA
Phone: 949 377 2227 Fax:
Project Manager: CLARE STEEDMAN

Date: 9/19/18 Page: 1 Of 2
Project Name: HAMILTON HIGHSCHOOL
Collector: DAN PHELPS WES SKILLINGS Client Project #: S030.008
Batch #: T182898 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270C	~~8021 BTEX~~ OCPs (8081)	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain*	6010/7000 Title 22 Metals	6020 ICP-MS Metals	Dioxins & Furans (8290)	PAHs (8270C SIM)	Pb & As (6020)	Laboratory ID #	Comments/Preservative	Total # of containers
B4-2.5	9/19/18	0745	S	5VOA 1802 (1)	X			X				X	X		X	X		01		
B4-2.5-DUP		0745			X			X				X	X		X	X		02		
B4-5.0		0747		5VOA 1802 (1)				X				X	X		X	X		03		
B63-5.0 (19)		0845		5VOA 1802	X							X	X					04		
B63-10.0 (24)		0848			X							X	X					05		
B63-15.0 (29)		0850			X							X	X					06		
B63-0.5		1225		(1) 802					X								X	07		
B63-1.5		1228							X								X	08		
B63-2.5		1230							X								X	09		
B66-0.5		1245							X								X	10		
B66-1.5		1248							X								X	11		
B66-2.5		1250							X								X	12		
~~B66~~ B71-0.5		1320							X								X	13		
B64-0.5		1330							X								X	14		
B64-1.5		1333							X								X	15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Dan [signature]	9/19/18 1540	[signature]	9-19-18 1540
[signature]	9-19-18 1856	[signature]	9-19-18 18:56

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.1

Turn around time:

Notes
* FOR TPH ANALYZE FOR TPH GRO AND TPH DRO/ORO
** PRODUCE EDD IN ESDAT FORMAT

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171038

SunStar Laboratories

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949-297-5020

Chain of Custody Record

Client: _____ Date: _____ Page: 2 Of 2

Address: _____ Project Name: _____

Phone: _____ Fax: _____ Collector: _____ Client Project #: _____

Project Manager: _____ Batch #: 7182898 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270 C	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain *	6010/7000 Title 22 Metals	6020 ~~ICP-MS Metals~~ Pb & As	OCPs (8081)	Dioxins Furans (8290)	PAHs (8270 C SIM)	Laboratory ID #	Comments/Preservative	Total # of containers
B64-2.5	9/19/18	1335	S	8 oz										X	X			16		
B73-0.5		1410												X	X			17		
B73-1.5		1413												X	X			18		
B73-2.5		1415												X	X			19		
B74-0.5		1425												X	X			20		
B74-1.5		1427												X	X			21		
B74-2.5		1430												X	X			22		
B48-0.5		1440												X	X			23		
B48-1.5		1443												X	X			24		
B48-2.5		1445												X	X			25		
B12-0.5		1455												X	X			26		
B12-1.5		1457												X	X			27		
B12-2.5		1500												X	X			28		
EB-03	9/19/18	1515	W	6vial 6 L	X			X				X	X	X	X	X	X	29		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9/19/18 1540		9-19-18 1540
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	9-19-18 1856		9-19-18 18:56
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers: _____

Chain of Custody seals Y/N/NA: _____

Seals intact? Y/N/NA: _____

Received good condition/cold: 4.1

Turn around time: _____

Notes

* TPH - ANALYZE FOR TPH-GRO AND TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171039

SunStar Laboratories

Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182898

Client Name: TERRAPHASE

Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☐ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 9.19.18 1540

Lab Received by: SUNNY

Date/Time Lab Received: 9.19.18 1856

Total number of coolers received:

Temperature: Cooler #1	2.9	°C +/- the CF (1.2°C) =	4.1	°C corrected temperature
Temperature: Cooler #2		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature: Cooler #3		°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	☒ **Yes**	☐ **No**
If NO:				
Samples received on ice?		☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?		☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☐ Yes	☒ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested ?	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BC 9.20.18

Comments:

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SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☐ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: B4-2.5DUP 4oz JAR RECEIVED BROKEN & IN A PLASTIC BAG. ALL 6-5035 KITS HAVE TERRAPHASE COVERING THE WEIGHTS ON EACH VOA. HCL WRITTEN ON EACH VOA OF THE 5035 KITS AS WELL

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Clare Steedman [clare.steedman@terraphase.com]
Sent: Thursday, September 20, 2018 11:38 AM
To: kris@sunstarlabs.com
Subject: RE: Hamilton High School
Attachments: image003.jpg; image001.png

Hi Kris,

Please see response below. Thanks.

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Kris Kubota <kris@sunstarlabs.com>
Sent: Thursday, September 20, 2018 11:11 AM
To: Clare Steedman <clare.steedman@terraphase.com>
Cc: Dan Phelps <dan.phelps@terraphase.com>
Subject: Hamilton High School

Good Morning Clare!

I have a few things I wanted to confirm with you.

- Samples B12-0.5, -1.5, -2.5 all should be labeled as B18-0.5, -1.5, -2.5. Yes.
- Also, Sample B4-5.0 is not marked on the COC as requiring 8260 analysis, but the other samples from B4 are marked as 8260. Please confirm you would like the 8260 analysis for B4-5.0. Yes, please analyze Sample B4-5.0 for 8260.
- We're subcontracting the dioxins and furans analysis on a 20-DAY TAT. Also confirm the TAT will work for you. If you would like them faster, we can arrange that but it would be an additional charge. 20-day TAT is ok.

Thank you so much Clare!

Kris Kubota
Project Manager/Regional Account Manager

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027 | Cell: (949) 577-2775
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

From: Rose Fasheh [Rose@sunstarlabs.com]
Sent: Monday, November 19, 2018 11:37 AM
To: 'Clare Steedman'
Cc: 'Mike'
Subject: Additional Request: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898
Attachments: T182803_WKO_02.pdf; T182898_WKO_02.pdf; T183211_WKO_02.pdf; T183212_WKO_03.pdf

Clare,

Please find attached revised work orders reflecting the additional STLC testing. Details are documented in the comments section (right hand side). We will have the additional STLC results for you before end of day Wednesday 11/28 as a standard 5-day TAT.

Let us know if you need anything else!

Happy Thanksgiving ☺

Rose Fasheh
Project Manager

SunStar Laboratories

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
Please note that SunStar Laboratories will be observing the Thanksgiving Holidays on Thursday and Friday, November 22nd and 23rd. In addition, GSO will not have scheduled service on Thursday, November 22nd. If you have any short hold samples arriving near or during these days, please contact your Project Manager in advance to ensure all holding times are met for your samples. SunStar will be available on Saturday, November 24th if needed to receive samples. Please let your Project Manager know if you will ship or deliver samples on this day.

We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:19 AM
To: Rose Fasheh
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Rose,

Thanks for the heads up. Standard turn is fine.

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Rose Fasheh <Rose@sunstarlabs.com>
Sent: Monday, November 19, 2018 11:18 AM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Good morning Clare,

Kris no longer works with SunStar, but I will go ahead and get those going for you. Is a standard 5-day TAT okay, or did you need the results expedited?

Thank you,

Rose Fasheh
Project Manager

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
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We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:12 AM
To: kris@sunstarlabs.com
Subject: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Kris,

Would you please analyze the following samples for **STLC** analysis?

B03-1.5 (T182803-28) for lead
B10-0.5 (T182803-42) for lead

B91-1.5 (T183211-05) for lead

B12-0.5 (T183212-17) for lead
B25-05 (T183212-14) for lead

B18-2.5 (T182898-28) for arsenic

Thank you,

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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WORK ORDER

T182898

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/27/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/19/18 18:56
Logged In By:	Brian Charon	Date Logged In:	09/20/18 08:06

Samples Received at:	**4.1°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	No		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
6010 Title 22	09/27/18 15:00	5	03/18/19 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 07:47	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:47	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:47	
8260 5035	09/27/18 15:00	5	10/03/18 07:47	
8270C	09/27/18 15:00	5	10/03/18 07:47	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:47	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-04 B63-5.0(19) [Soil] Sampled 09/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:45	
8260 5035	09/27/18 15:00	5	10/03/18 08:45	
T182898-05 B63-10.0(24) [Soil] Sampled 09/19/18 08:48 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:48	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:48	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:48	
8260 5035	09/27/18 15:00	5	10/03/18 08:48	
T182898-06 B63-15.0(29) [Soil] Sampled 09/19/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 08:50	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:50	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:50	
8260 5035	09/27/18 15:00	5	10/03/18 08:50	
T182898-07 B63-0.5 [Soil] Sampled 09/19/18 12:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:25	
T182898-08 B63-1.5 [Soil] Sampled 09/19/18 12:28 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:28	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:28	
T182898-09 B63-2.5 [Soil] Sampled 09/19/18 12:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:30	
T182898-10 B66-0.5 [Soil] Sampled 09/19/18 12:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:45	
T182898-11 B66-1.5 [Soil] Sampled 09/19/18 12:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:48	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:48	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-12 B66-2.5 [Soil] Sampled 09/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:50	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:50	
T182898-13 B71-0.5 [Soil] Sampled 09/19/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:20	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:20	
T182898-14 B64-0.5 [Soil] Sampled 09/19/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:30	
T182898-15 B64-1.5 [Soil] Sampled 09/19/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:33	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:33	
T182898-16 B64-2.5 [Soil] Sampled 09/19/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:35	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:35	
T182898-17 B73-0.5 [Soil] Sampled 09/19/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:10	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:10	
T182898-18 B73-1.5 [Soil] Sampled 09/19/18 14:13 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:13	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:13	
T182898-19 B73-2.5 [Soil] Sampled 09/19/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:15	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:15	
T182898-20 B74-0.5 [Soil] Sampled 09/19/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:25	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-21 B74-1.5 [Soil] Sampled 09/19/18 14:27 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:27	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:27	
T182898-22 B74-2.5 [Soil] Sampled 09/19/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:30	
T182898-23 B48-0.5 [Soil] Sampled 09/19/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:40	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:40	
T182898-24 B48-1.5 [Soil] Sampled 09/19/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:43	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:43	
T182898-25 B48-2.5 [Soil] Sampled 09/19/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:45	
T182898-26 B18-0.5 [Soil] Sampled 09/19/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:55	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:55	
T182898-27 B18-1.5 [Soil] Sampled 09/19/18 14:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:57	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:57	
T182898-28 B18-2.5 [Soil] Sampled 09/19/18 15:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 15:00	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 15:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	03/18/19 15:15	
6020 Metals by ICP-MS	09/27/18 15:00	5	03/18/19 15:15	As and Pb only
8015 CC (D/MO)	09/27/18 15:00	5	09/26/18 15:15	
8015 m Gas Purge	09/27/18 15:00	5	10/03/18 15:15	
8081 Pesticides	09/27/18 15:00	5	09/26/18 15:15	
8260	09/27/18 15:00	5	10/03/18 15:15	
8270C	09/27/18 15:00	5	09/26/18 15:15	
8270C PAH SIM	09/27/18 15:00	5	09/26/18 15:15	

Frontier Analytical Laboratory

T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				**4oz jar received broken and in 1g bag**
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:47	8290 Dioxins/Furans
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 15:15	8290 Dioxins/Furans

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/19/2018 4:58:07PM

WORK ORDER

T182898

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**[none]**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	09/27/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	09/19/18 18:56
Logged In By:	Brian Charon	Date Logged In:	09/20/18 08:06

Samples Received at:	**4.1°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	No		
COC/Labels Agree	Yes		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 07:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:45	
8260 5035	09/27/18 15:00	5	10/03/18 07:45	
8270C	09/27/18 15:00	5	10/03/18 07:45	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 07:47	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 07:47	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 07:47	
8260 5035	09/27/18 15:00	5	10/03/18 07:47	
8270C	09/27/18 15:00	5	10/03/18 07:47	
8270C PAH SIM	09/27/18 15:00	5	10/03/18 07:47	
T182898-04 B63-5.0(19) [Soil] Sampled 09/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 08:45	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:45	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:45	
8260 5035	09/27/18 15:00	5	10/03/18 08:45	
T182898-05 B63-10.0(24) [Soil] Sampled 09/19/18 08:48 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 08:48	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:48	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:48	
8260 5035	09/27/18 15:00	5	10/03/18 08:48	
T182898-06 B63-15.0(29) [Soil] Sampled 09/19/18 08:50 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 08:50	
8015 CC (D/MO)	09/27/18 15:00	5	10/03/18 08:50	
8015 m 5035-GRO	09/27/18 15:00	5	10/03/18 08:50	
8260 5035	09/27/18 15:00	5	10/03/18 08:50	
T182898-07 B63-0.5 [Soil] Sampled 09/19/18 12:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:25	
T182898-08 B63-1.5 [Soil] Sampled 09/19/18 12:28 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:28	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:28	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-09 B63-2.5 [Soil] Sampled 09/19/18 12:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:30	
T182898-10 B66-0.5 [Soil] Sampled 09/19/18 12:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:45	
T182898-11 B66-1.5 [Soil] Sampled 09/19/18 12:48 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:48	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:48	
T182898-12 B66-2.5 [Soil] Sampled 09/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 12:50	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 12:50	
T182898-13 B71-0.5 [Soil] Sampled 09/19/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:20	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:20	
T182898-14 B64-0.5 [Soil] Sampled 09/19/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:30	
T182898-15 B64-1.5 [Soil] Sampled 09/19/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:33	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:33	
T182898-16 B64-2.5 [Soil] Sampled 09/19/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 13:35	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 13:35	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-17 B73-0.5 [Soil] Sampled 09/19/18 14:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:10	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:10	
T182898-18 B73-1.5 [Soil] Sampled 09/19/18 14:13 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:13	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:13	
T182898-19 B73-2.5 [Soil] Sampled 09/19/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:15	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:15	
T182898-20 B74-0.5 [Soil] Sampled 09/19/18 14:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:25	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:25	
T182898-21 B74-1.5 [Soil] Sampled 09/19/18 14:27 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:27	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:27	
T182898-22 B74-2.5 [Soil] Sampled 09/19/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:30	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:30	
T182898-23 B48-0.5 [Soil] Sampled 09/19/18 14:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:40	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:40	
T182898-24 B48-1.5 [Soil] Sampled 09/19/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:43	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:43	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T182898

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: [none]

Analysis	Due	TAT	Expires	Comments
T182898-25 B48-2.5 [Soil] Sampled 09/19/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:45	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:45	
T182898-26 B18-0.5 [Soil] Sampled 09/19/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:55	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:55	
T182898-27 B18-1.5 [Soil] Sampled 09/19/18 14:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 14:57	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 14:57	
T182898-28 B18-2.5 [Soil] Sampled 09/19/18 15:00 (GMT-08:00) Pacific Time (US &				**STLC for Arsenic added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	09/27/18 15:00	5	01/17/19 15:00	As and Pb only
8081 Pesticides	09/27/18 15:00	5	10/03/18 15:00	
STLC Pb	11/28/18 15:00	5	03/18/19 15:00	As only
STLC Leaching Procedure Metals	11/28/18 15:00	5	10/03/18 15:00	
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	09/27/18 15:00	5	09/24/18 15:15	
6020 Metals by ICP-MS	09/27/18 15:00	5	03/18/19 15:15	As and Pb only
8015 CC (D/MO)	09/27/18 15:00	5	09/26/18 15:15	
8015 m Gas Purge	09/27/18 15:00	5	10/03/18 15:15	
8081 Pesticides	09/27/18 15:00	5	09/26/18 15:15	
8260	09/27/18 15:00	5	10/03/18 15:15	
8270C	09/27/18 15:00	5	09/26/18 15:15	
8270C PAH SIM	09/27/18 15:00	5	09/26/18 15:15	

Frontier Analytical Laboratory

T182898-01 B4-2.5 [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans

SunStar Laboratories, Inc.
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WORK ORDER

T182898

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Frontier Analytical Laboratory				
T182898-02 B4-2.5 DUP [Soil] Sampled 09/19/18 07:45 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:45	8290 Dioxins/Furans
T182898-03 B4-5 [Soil] Sampled 09/19/18 07:47 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 07:47	8290 Dioxins/Furans
T182898-29 EB-03 [Water] Sampled 09/19/18 15:15 (GMT-08:00) Pacific Time (US &				
Misc. Subcontract (see notes)	10/16/18 15:00	20	03/18/19 15:15	8290 Dioxins/Furans

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

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29 October 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 14:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B68-0.5	T183211-01	Soil	10/20/18 08:10	10/22/18 14:25
B68-1.5	T183211-02	Soil	10/20/18 08:12	10/22/18 14:25
B68-2.5	T183211-03	Soil	10/20/18 08:15	10/22/18 14:25
B91-0.5	T183211-04	Soil	10/20/18 08:30	10/22/18 14:25
B91-1.5	T183211-05	Soil	10/20/18 08:35	10/22/18 14:25
B91-2.5	T183211-06	Soil	10/20/18 08:40	10/22/18 14:25
B92-0.5	T183211-07	Soil	10/20/18 08:42	10/22/18 14:25
B92-0.5-DUP	T183211-08	Soil	10/20/18 08:42	10/22/18 14:25
B92-1.5	T183211-09	Soil	10/20/18 08:45	10/22/18 14:25
B92-1.5-DUP	T183211-10	Soil	10/20/18 08:45	10/22/18 14:25
B92-2.5	T183211-11	Soil	10/20/18 08:50	10/22/18 14:25
B92-2.5-DUP	T183211-12	Soil	10/20/18 08:50	10/22/18 14:25
B51-0.5	T183211-13	Soil	10/20/18 09:30	10/22/18 14:25
B51-0.5-DUP	T183211-14	Soil	10/20/18 09:30	10/22/18 14:25
B51-1.5	T183211-15	Soil	10/20/18 09:40	10/22/18 14:25
B51-1.5-DUP	T183211-16	Soil	10/20/18 09:40	10/22/18 14:25
B13-0.5	T183211-17	Soil	10/20/18 10:25	10/22/18 14:25
B13-0.5-DUP	T183211-18	Soil	10/20/18 10:25	10/22/18 14:25
B13-1.5	T183211-19	Soil	10/20/18 10:30	10/22/18 14:25
B13-2.5	T183211-20	Soil	10/20/18 10:32	10/22/18 14:25
B15-0.5	T183211-21	Soil	10/20/18 10:50	10/22/18 14:25
B15-1.5	T183211-22	Soil	10/20/18 10:55	10/22/18 14:25
B15-2.5	T183211-23	Soil	10/20/18 11:00	10/22/18 14:25
B26-0.5	T183211-24	Soil	10/20/18 11:05	10/22/18 14:25
B26-0.5-DUP	T183211-25	Soil	10/20/18 11:05	10/22/18 14:25
B26-1.5	T183211-26	Soil	10/20/18 11:10	10/22/18 14:25

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B26-1.5-DUP	T183211-27	Soil	10/20/18 11:10	10/22/18 14:25
B26-2.5	T183211-28	Soil	10/20/18 11:15	10/22/18 14:25
B26-2.5-DUP	T183211-29	Soil	10/20/18 11:15	10/22/18 14:25
B32-0.5	T183211-30	Soil	10/20/18 11:45	10/22/18 14:25
B32-1.5	T183211-31	Soil	10/20/18 11:50	10/22/18 14:25
B32-2.5	T183211-32	Soil	10/20/18 11:55	10/22/18 14:25
B45-0.5	T183211-33	Soil	10/20/18 12:00	10/22/18 14:25
B45-1.5	T183211-34	Soil	10/20/18 12:10	10/22/18 14:25
B45-2.5	T183211-35	Soil	10/20/18 12:15	10/22/18 14:25
B44-0.5	T183211-36	Soil	10/20/18 13:20	10/22/18 14:25
B44-1.5	T183211-37	Soil	10/20/18 13:30	10/22/18 14:25
B44-2.5	T183211-38	Soil	10/20/18 13:33	10/22/18 14:25
B43-0.5	T183211-39	Soil	10/20/18 13:40	10/22/18 14:25
B43-1.5	T183211-40	Soil	10/20/18 13:45	10/22/18 14:25
B43-2.5	T183211-41	Soil	10/20/18 13:50	10/22/18 14:25
B42-0.5	T183211-42	Soil	10/20/18 14:00	10/22/18 14:25
B72-0.5	T183211-43	Soil	10/20/18 14:45	10/22/18 14:25
B72-1.5	T183211-44	Soil	10/20/18 14:50	10/22/18 14:25
B72-2.5	T183211-45	Soil	10/20/18 14:55	10/22/18 14:25
B49-0.5	T183211-46	Soil	10/20/18 14:30	10/22/18 14:25
B49-1.5	T183211-47	Soil	10/20/18 14:30	10/22/18 14:25
B49-2.5	T183211-48	Soil	10/20/18 14:30	10/22/18 14:25
B47-0.5	T183211-49	Soil	10/20/18 14:15	10/22/18 14:25
B47-1.5	T183211-50	Soil	10/20/18 14:17	10/22/18 14:25
B47-2.5	T183211-51	Soil	10/20/18 14:18	10/22/18 14:25
B67-0.5	T183211-52	Soil	10/20/18 14:43	10/22/18 14:25

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B67-1.5	T183211-53	Soil	10/20/18 14:45	10/22/18 14:25
B67-2.5	T183211-54	Soil	10/20/18 14:47	10/22/18 14:25
B41-0.5	T183211-55	Soil	10/20/18 13:57	10/22/18 14:25
B41-1.5	T183211-56	Soil	10/20/18 13:59	10/22/18 14:25
B41-2.5	T183211-57	Soil	10/20/18 14:01	10/22/18 14:25
B28-0.5	T183211-58	Soil	10/20/18 13:42	10/22/18 14:25
B28-1.5	T183211-59	Soil	10/20/18 13:44	10/22/18 14:25

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

DETECTIONS SUMMARY

Sample ID: B68-0.5 **Laboratory ID:** T183211-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B68-1.5 **Laboratory ID:** T183211-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**23**	0.25	mg/kg	6020 ICP-MS	
Lead	**18**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B68-2.5 **Laboratory ID:** T183211-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B91-0.5 **Laboratory ID:** T183211-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.2**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**66**	5.0	ug/kg	EPA 8081A	

Sample ID: B91-1.5 **Laboratory ID:** T183211-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**90**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**5.2**	5.0	ug/kg	EPA 8081A	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Sample ID: B91-2.5 **Laboratory ID:** T183211-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**9.7**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B92-0.5 **Laboratory ID:** T183211-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.2**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**17**	5.0	ug/kg	EPA 8081A	

Sample ID: B92-0.5-DUP **Laboratory ID:** T183211-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**4.5**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**6.7**	5.0	ug/kg	EPA 8081A	

Sample ID: B92-1.5 **Laboratory ID:** T183211-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B92-1.5-DUP **Laboratory ID:** T183211-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B92-2.5 **Laboratory ID:** T183211-11

Analyte	Result	Reporting Limit	Units	Method	Notes

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	Reported:
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Sample ID: B92-2.5 **Laboratory ID:** T183211-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**16**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B92-2.5-DUP **Laboratory ID:** T183211-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**10**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B51-0.5 **Laboratory ID:** T183211-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B51-0.5-DUP **Laboratory ID:** T183211-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**15**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B51-1.5 **Laboratory ID:** T183211-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**15**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B51-1.5-DUP **Laboratory ID:** T183211-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.7**	0.25	mg/kg	6020 ICP-MS	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Sample ID: B13-0.5 **Laboratory ID:** T183211-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**36**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B13-0.5-DUP **Laboratory ID:** T183211-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B13-1.5 **Laboratory ID:** T183211-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**15**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B13-2.5 **Laboratory ID:** T183211-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**16**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B15-0.5 **Laboratory ID:** T183211-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B15-1.5 **Laboratory ID:** T183211-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.0**	0.25	mg/kg	6020 ICP-MS	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	Reported:
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Sample ID: B15-2.5 **Laboratory ID:** T183211-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**56**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B26-0.5 **Laboratory ID:** T183211-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B26-0.5-DUP **Laboratory ID:** T183211-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B26-1.5 **Laboratory ID:** T183211-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.6**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B26-1.5-DUP **Laboratory ID:** T183211-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.1**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B26-2.5 **Laboratory ID:** T183211-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.9**	0.25	mg/kg	6020 ICP-MS	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	Reported:
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Sample ID: B26-2.5-DUP **Laboratory ID:** T183211-29

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B32-0.5 **Laboratory ID:** T183211-30

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B32-1.5 **Laboratory ID:** T183211-31

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B32-2.5 **Laboratory ID:** T183211-32

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**17**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B45-0.5 **Laboratory ID:** T183211-33

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**60**	1.0	mg/kg	EPA 6010b	
Chromium	**8.1**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.1**	2.0	mg/kg	EPA 6010b	
Copper	**14**	1.0	mg/kg	EPA 6010b	
Lead	**17**	3.0	mg/kg	EPA 6010b	
Nickel	**5.6**	2.0	mg/kg	EPA 6010b	
Vanadium	**29**	5.0	mg/kg	EPA 6010b	
Zinc	**45**	1.0	mg/kg	EPA 6010b	

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Sample ID: B45-1.5 **Laboratory ID:** T183211-34

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**25**	2.0	mg/kg	EPA 6010b	
Cobalt	**9.7**	2.0	mg/kg	EPA 6010b	
Copper	**26**	1.0	mg/kg	EPA 6010b	
Nickel	**17**	2.0	mg/kg	EPA 6010b	
Vanadium	**65**	5.0	mg/kg	EPA 6010b	
Zinc	**59**	1.0	mg/kg	EPA 6010b	

Sample ID: B45-2.5 **Laboratory ID:** T183211-35

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**110**	0.91	mg/kg	EPA 6010b	
Chromium	**23**	1.8	mg/kg	EPA 6010b	
Cobalt	**8.8**	1.8	mg/kg	EPA 6010b	
Copper	**24**	0.91	mg/kg	EPA 6010b	
Nickel	**19**	1.8	mg/kg	EPA 6010b	
Vanadium	**61**	4.5	mg/kg	EPA 6010b	
Zinc	**53**	0.91	mg/kg	EPA 6010b	

Sample ID: B44-0.5 **Laboratory ID:** T183211-36

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**22**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B44-1.5 **Laboratory ID:** T183211-37

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B44-2.5 **Laboratory ID:** T183211-38

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B43-0.5 **Laboratory ID:** T183211-39

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**10**	0.25	mg/kg	6020 ICP-MS	
Lead	**21**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B43-1.5 **Laboratory ID:** T183211-40

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B43-2.5 **Laboratory ID:** T183211-41

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B42-0.5 **Laboratory ID:** T183211-42

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B72-0.5 **Laboratory ID:** T183211-43

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.0**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B72-1.5 **Laboratory ID:** T183211-44

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B72-2.5 **Laboratory ID:** T183211-45

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B49-0.5 **Laboratory ID:** T183211-46

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B49-1.5 **Laboratory ID:** T183211-47

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B49-2.5 **Laboratory ID:** T183211-48

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B47-0.5 **Laboratory ID:** T183211-49

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.23	mg/kg	6020 ICP-MS	
Lead	**17**	0.23	mg/kg	6020 ICP-MS	

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Sample ID: B47-1.5 **Laboratory ID:** T183211-50

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B47-2.5 **Laboratory ID:** T183211-51

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B67-0.5 **Laboratory ID:** T183211-52

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**20**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B67-1.5 **Laboratory ID:** T183211-53

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B67-2.5 **Laboratory ID:** T183211-54

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**2.5**	0.23	mg/kg	6020 ICP-MS	
Lead	**3.3**	0.23	mg/kg	6020 ICP-MS	

Sample ID: B41-0.5 **Laboratory ID:** T183211-55

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**7.0**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.8**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B41-1.5 **Laboratory ID:** T183211-56

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B41-2.5 **Laboratory ID:** T183211-57

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.3**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**14**	5.0	ug/kg	EPA 8081A	
4,4´-DDD	**8.0**	5.0	ug/kg	EPA 8081A	
4,4´-DDT	**24**	5.0	ug/kg	EPA 8081A	

Sample ID: B28-0.5 **Laboratory ID:** T183211-58

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B28-1.5 **Laboratory ID:** T183211-59

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.6**	0.25	mg/kg	6020 ICP-MS	

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B68-0.5

T183211-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*52.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*60.8 %*	*35-140*		"	"	"	"	

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B68-1.5

T183211-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**23**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**18**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*85.6 %*	*35-140*		"	"	"	"	

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B68-2.5

T183211-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B91-0.5

T183211-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**66**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*45.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*52.5 %*	*35-140*		"	"	"	"	

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B91-1.5

T183211-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**90**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**5.2**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*47.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*66.1 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B91-2.5

T183211-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**9.7**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*56.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B92-0.5

T183211-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**11**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**6.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**17**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*65.9 %*	*35-140*		"	"	"	"	

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B92-0.5-DUP

T183211-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**4.5**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**6.7**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*55.6 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.6 %*	*35-140*		"	"	"	"	

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B92-1.5

T183211-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102332	10/23/18	10/27/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*63.7 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*73.5 %*	*35-140*		"	"	"	"	

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B92-1.5-DUP

T183211-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*64.4 %*	*35-140*		"	"	"	"	

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B92-2.5

T183211-11 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**16**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.0 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*65.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B92-2.5-DUP

T183211-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**10**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B51-0.5

T183211-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.0 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*75.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B51-0.5

T183211-13 (Soil)

SunStar Laboratories, Inc.

Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*93.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*101 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B51-0.5-DUP

T183211-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**15**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B51-0.5-DUP

T183211-14 (Soil)

SunStar Laboratories, Inc.

Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*77.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B51-1.5

T183211-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**15**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.2 %*	*35-140*		*"*	*"*	*"*	*"*	

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B51-1.5

T183211-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*93.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*122 %*	*35-140*		*"*	*"*	*"*	*"*	

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B51-1.5-DUP

T183211-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**9.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.2 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B51-1.5-DUP

T183211-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*92.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*118 %*	*35-140*		*"*	*"*	*"*	*"*	

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B13-0.5

T183211-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**36**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8102332	10/23/18	10/27/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*66.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*67.0 %*	*35-140*		"	"	"	"	

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B13-0.5-DUP

T183211-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B13-1.5

T183211-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8102321	10/23/18	10/23/18	6020 ICP-MS	
Lead	**15**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B13-2.5

T183211-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**16**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102332	10/23/18	10/27/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*80.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B15-0.5

T183211-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8102329	10/23/18	10/25/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*76.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B15-0.5

T183211-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*99.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*117 %*	*35-140*		*"*	*"*	*"*	*"*	

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B15-1.5

T183211-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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B15-1.5

T183211-22 (Soil)

SunStar Laboratories, Inc.

Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*103 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*119 %*	*35-140*		*"*	*"*	*"*	*"*	

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B15-2.5

T183211-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**56**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B15-2.5

T183211-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*102 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*123 %*	*35-140*		*"*	*"*	*"*	*"*	

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B26-0.5

T183211-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**9.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8102329	10/23/18	10/25/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*86.7 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*87.3 %*	*35-140*		"	"	"	"	

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B26-0.5-DUP

T183211-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*83.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*75.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B26-1.5

T183211-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**8.6**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*79.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B26-1.5-DUP

T183211-27 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**6.1**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*80.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B26-2.5

T183211-28 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**9.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B26-2.5-DUP

T183211-29 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B32-0.5

T183211-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**9.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B32-0.5

T183211-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*94.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*117 %*	*35-140*		*"*	*"*	*"*	*"*	

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B32-1.5

T183211-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*77.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B32-1.5

T183211-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*92.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*117 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B32-2.5

T183211-32 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**17**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/25/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*81.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B32-2.5

T183211-32 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*89.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*114 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-0.5

T183211-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	670	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*112 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/24/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*118 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**60**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**8.1**	2.0	"	"	"	"	"	"	
Cobalt	**6.1**	2.0	"	"	"	"	"	"	
Copper	**14**	1.0	"	"	"	"	"	"	
Lead	**17**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.6**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**29**	5.0	"	"	"	"	"	"	
Zinc	**45**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-0.5

T183211-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	8.0	ug/kg	1	8102231	10/22/18	10/22/18	EPA 8260B/5035	
Bromochloromethane	ND	8.0	"	"	"	"	"	"	
Bromodichloromethane	ND	8.0	"	"	"	"	"	"	
Bromoform	ND	8.0	"	"	"	"	"	"	
Bromomethane	ND	8.0	"	"	"	"	"	"	
n-Butylbenzene	ND	8.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	8.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	8.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	8.0	"	"	"	"	"	"	
Chlorobenzene	ND	8.0	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Chloroform	ND	8.0	"	"	"	"	"	"	
Chloromethane	ND	8.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	8.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	8.0	"	"	"	"	"	"	
Dibromochloromethane	ND	8.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	16	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	8.0	"	"	"	"	"	"	
Dibromomethane	ND	8.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	8.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	8.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	8.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	8.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	8.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-0.5

T183211-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	8.0	ug/kg	1	8102231	10/22/18	10/22/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	8.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	8.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	8.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	8.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	8.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	8.0	"	"	"	"	"	"	
Isopropylbenzene	ND	8.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	8.0	"	"	"	"	"	"	
Methylene chloride	ND	8.0	"	"	"	"	"	"	
Naphthalene	ND	8.0	"	"	"	"	"	"	
n-Propylbenzene	ND	8.0	"	"	"	"	"	"	
Styrene	ND	8.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	8.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	8.0	"	"	"	"	"	"	
Tetrachloroethene	ND	8.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	8.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	8.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	8.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	8.0	"	"	"	"	"	"	
Trichloroethene	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	8.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	8.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	8.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	8.0	"	"	"	"	"	"	
Vinyl chloride	ND	8.0	"	"	"	"	"	"	
Benzene	ND	8.0	"	"	"	"	"	"	
Toluene	ND	8.0	"	"	"	"	"	"	
Ethylbenzene	ND	8.0	"	"	"	"	"	"	
m,p-Xylene	ND	16	"	"	"	"	"	"	
o-Xylene	ND	8.0	"	"	"	"	"	"	

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B45-0.5

T183211-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8102231*	*10/22/18*	*10/22/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*90.3 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*108 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-1.5

T183211-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	430	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*106 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/24/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*127 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**25**	2.0	"	"	"	"	"	"	
Cobalt	**9.7**	2.0	"	"	"	"	"	"	
Copper	**26**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**17**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**65**	5.0	"	"	"	"	"	"	
Zinc	**59**	1.0	"	"	"	"	"	"	

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B45-1.5

T183211-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.7	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	4.7	"	"	"	"	"	"	
Bromodichloromethane	ND	4.7	"	"	"	"	"	"	
Bromoform	ND	4.7	"	"	"	"	"	"	
Bromomethane	ND	4.7	"	"	"	"	"	"	
n-Butylbenzene	ND	4.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.7	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Chloroethane	ND	4.7	"	"	"	"	"	"	
Chloroform	ND	4.7	"	"	"	"	"	"	
Chloromethane	ND	4.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.7	"	"	"	"	"	"	
Dibromochloromethane	ND	4.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.4	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.7	"	"	"	"	"	"	
Dibromomethane	ND	4.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.7	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.7	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.7	"	"	"	"	"	"	

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B45-1.5

T183211-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.7	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.7	"	"	"	"	"	"	
Isopropylbenzene	ND	4.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.7	"	"	"	"	"	"	
Methylene chloride	ND	4.7	"	"	"	"	"	"	
Naphthalene	ND	4.7	"	"	"	"	"	"	
n-Propylbenzene	ND	4.7	"	"	"	"	"	"	
Styrene	ND	4.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.7	"	"	"	"	"	"	
Tetrachloroethene	ND	4.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.7	"	"	"	"	"	"	
Trichloroethene	ND	4.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.7	"	"	"	"	"	"	
Vinyl chloride	ND	4.7	"	"	"	"	"	"	
Benzene	ND	4.7	"	"	"	"	"	"	
Toluene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.7	"	"	"	"	"	"	
m,p-Xylene	ND	9.4	"	"	"	"	"	"	
o-Xylene	ND	4.7	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-1.5

T183211-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8102231*	*10/22/18*	*10/23/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*90.2 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*110 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-2.5

T183211-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	700	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*101 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/24/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*133 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	2.7	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	1.8	"	"	"	"	"	"	
Arsenic	ND	4.5	"	"	"	"	"	"	
Barium	**110**	0.91	"	"	"	"	"	"	
Beryllium	ND	0.91	"	"	"	"	10/23/18	"	
Cadmium	ND	1.8	"	"	"	"	10/23/18	"	
Chromium	**23**	1.8	"	"	"	"	"	"	
Cobalt	**8.8**	1.8	"	"	"	"	"	"	
Copper	**24**	0.91	"	"	"	"	"	"	
Lead	ND	2.7	"	"	"	"	"	"	
Molybdenum	ND	4.5	"	"	"	"	"	"	
Nickel	**19**	1.8	"	"	"	"	"	"	
Selenium	ND	4.5	"	"	"	"	"	"	
Thallium	ND	1.8	"	"	"	"	"	"	
Vanadium	**61**	4.5	"	"	"	"	"	"	
Zinc	**53**	0.91	"	"	"	"	"	"	

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B45-2.5

T183211-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	7.1	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	7.1	"	"	"	"	"	"	
Bromodichloromethane	ND	7.1	"	"	"	"	"	"	
Bromoform	ND	7.1	"	"	"	"	"	"	
Bromomethane	ND	7.1	"	"	"	"	"	"	
n-Butylbenzene	ND	7.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	7.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	7.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	7.1	"	"	"	"	"	"	
Chlorobenzene	ND	7.1	"	"	"	"	"	"	
Chloroethane	ND	7.1	"	"	"	"	"	"	
Chloroform	ND	7.1	"	"	"	"	"	"	
Chloromethane	ND	7.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	7.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	7.1	"	"	"	"	"	"	
Dibromochloromethane	ND	7.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	14	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.1	"	"	"	"	"	"	
Dibromomethane	ND	7.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	7.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	7.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	7.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	7.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	7.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	7.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	7.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	7.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	7.1	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B45-2.5

T183211-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	7.1	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	7.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	7.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	7.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	7.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	7.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	7.1	"	"	"	"	"	"	
Isopropylbenzene	ND	7.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	7.1	"	"	"	"	"	"	
Methylene chloride	ND	7.1	"	"	"	"	"	"	
Naphthalene	ND	7.1	"	"	"	"	"	"	
n-Propylbenzene	ND	7.1	"	"	"	"	"	"	
Styrene	ND	7.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.1	"	"	"	"	"	"	
Tetrachloroethene	ND	7.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	7.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	7.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	7.1	"	"	"	"	"	"	
Trichloroethene	ND	7.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	7.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	7.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	7.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	7.1	"	"	"	"	"	"	
Benzene	ND	7.1	"	"	"	"	"	"	
Toluene	ND	7.1	"	"	"	"	"	"	
Ethylbenzene	ND	7.1	"	"	"	"	"	"	
m,p-Xylene	ND	14	"	"	"	"	"	"	
o-Xylene	ND	7.1	"	"	"	"	"	"	

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B45-2.5

T183211-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*		*76.1-127*	*8102231*	*10/22/18*	*10/23/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*94.4 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*113 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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B44-0.5

T183211-36 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**22**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*57.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*64.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B44-1.5

T183211-37 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*65.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*66.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B44-2.5

T183211-38 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**8.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*42.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*64.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B43-0.5

T183211-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**10**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**21**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102329	10/23/18	10/26/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*50.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*63.5 %*	*35-140*		"	"	"	"	

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B43-0.5

T183211-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/26/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*106 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*126 %*	*35-140*		*"*	*"*	*"*	*"*	

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T183211-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102329	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*47.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*66.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B43-1.5

T183211-40 (Soil)

SunStar Laboratories, Inc.

Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*89.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*107 %*	*35-140*		*"*	*"*	*"*	*"*	

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B43-2.5

T183211-41 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102322	10/23/18	10/23/18	6020 ICP-MS	
Lead	**7.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*60.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B43-2.5

T183211-41 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*90.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*108 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B42-0.5

T183211-42 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8102336	10/23/18	10/26/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*66.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*57.1 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B72-0.5

T183211-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**8.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*53.3 %*	*35-140*		"	"	"	"	

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B72-0.5

T183211-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*87.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*96.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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B72-1.5

T183211-44 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*64.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*58.1 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B72-1.5

T183211-44 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*97.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*112 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B72-2.5

T183211-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*61.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B72-2.5

T183211-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102420	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*94.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*112 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B49-0.5

T183211-46 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**7.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*61.9 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B49-1.5

T183211-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**6.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*63.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B49-2.5

T183211-48 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**8.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*57.9 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B47-0.5

T183211-49 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.23	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**17**	0.23	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*58.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B47-1.5

T183211-50 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**9.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*90.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*70.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B47-2.5

T183211-51 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**8.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*89.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*86.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B67-0.5

T183211-52 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**20**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*63.1 %*	*35-140*		"	"	"	"	

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B67-1.5

T183211-53 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**7.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*57.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B67-2.5

T183211-54 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**2.5**	0.23	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**3.3**	0.23	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*124 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*108 %*	*35-140*		*"*	*"*	*"*	*"*	

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B41-0.5

T183211-55 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**7.0**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**8.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*63.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B41-1.5

T183211-56 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*63.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

B41-2.5

T183211-57 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**7.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**14**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	**8.0**	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	**24**	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*60.9 %*	*35-140*		"	"	"	"	

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B28-0.5

T183211-58 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**9.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.6 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*69.5 %*	*35-140*		"	"	"	"	

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B28-1.5

T183211-59 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102413	10/24/18	10/24/18	6020 ICP-MS	
Lead	**6.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102336	10/23/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*63.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102316 - EPA 5035 GC										
Blank (8102316-BLK1)				Prepared: 10/23/18 Analyzed: 10/25/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*111*		*"*	*100*		*111*	*65-135*			
LCS (8102316-BS1)				Prepared: 10/23/18 Analyzed: 10/25/18						
C4-C12 (GRO)	10900		ug/kg	11000		98.8	75-125			
Surrogate: 4-Bromofluorobenzene	*128*		*"*	*100*		*128*	*65-135*			
LCS Dup (8102316-BSD1)				Prepared: 10/23/18 Analyzed: 10/25/18						
C4-C12 (GRO)	11000		ug/kg	11000		100	75-125	1.21	20	
Surrogate: 4-Bromofluorobenzene	*129*		*"*	*100*		*129*	*65-135*			

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Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102414 - EPA 3550B GC										
Blank (8102414-BLK1)				Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*119*		*"*	*99.0*		*120*	*65-135*			
LCS (8102414-BS1)				Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	500	10	mg/kg	495		101	75-125			
Surrogate: p-Terphenyl	*107*		*"*	*99.0*		*109*	*65-135*			
Matrix Spike (8102414-MS1)		**Source: T183211-33**		Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	520	10	mg/kg	490	ND	107	75-125			
Surrogate: p-Terphenyl	*116*		*"*	*98.0*		*118*	*65-135*			
Matrix Spike Dup (8102414-MSD1)		**Source: T183211-33**		Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	500	10	mg/kg	490	ND	102	75-125	4.05	20	
Surrogate: p-Terphenyl	*112*		*"*	*98.0*		*114*	*65-135*			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102318 - EPA 3050B										
Blank (8102318-BLK1)				Prepared & Analyzed: 10/23/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8102318-BS1)				Prepared & Analyzed: 10/23/18						
Arsenic	105	5.0	mg/kg	100		105	75-125			
Barium	109	1.0	"	100		109	75-125			
Cadmium	107	2.0	"	100		107	75-125			
Chromium	109	2.0	"	100		109	75-125			
Lead	108	3.0	"	100		108	75-125			
Matrix Spike (8102318-MS1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Arsenic	87.3	5.0	mg/kg	100	ND	87.3	75-125			
Barium	386	1.0	"	100	217	169	75-125			QR-04
Cadmium	109	2.0	"	100	ND	109	75-125			
Chromium	112	2.0	"	100	2.58	109	75-125			
Lead	120	3.0	"	100	ND	120	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102318 - EPA 3050B										
Matrix Spike Dup (8102318-MSD1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Arsenic	84.3	5.0	mg/kg	100	ND	84.3	75-125	3.49	20	
Barium	338	1.0	"	100	217	121	75-125	13.5	20	
Cadmium	96.6	2.0	"	100	ND	96.6	75-125	12.4	20	
Chromium	97.3	2.0	"	100	2.58	94.7	75-125	13.7	20	
Lead	112	3.0	"	100	ND	112	75-125	7.28	20	

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102321 - EPA 3050B										
Blank (8102321-BLK1)				Prepared & Analyzed: 10/23/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8102321-BS1)				Prepared & Analyzed: 10/23/18						
Arsenic	27.1	0.25	mg/kg	25.0		108	80-120			
Lead	29.6	0.25	"	25.0		119	80-120			
Matrix Spike (8102321-MS1)		**Source: T183211-01**		Prepared & Analyzed: 10/23/18						
Arsenic	45.8	0.25	mg/kg	24.3	18.6	112	75-125			
Lead	37.5	0.25	"	24.3	7.74	123	75-125			
Matrix Spike (8102321-MS2)		**Source: T183211-02**		Prepared & Analyzed: 10/23/18						
Arsenic	45.7	0.25	mg/kg	24.5	22.9	93.1	75-125			
Lead	53.9	0.25	"	24.5	17.9	147	75-125			QR-04
Matrix Spike Dup (8102321-MSD1)		**Source: T183211-01**		Prepared & Analyzed: 10/23/18						
Arsenic	49.1	0.25	mg/kg	25.0	18.6	122	75-125	6.85	20	
Lead	41.1	0.25	"	25.0	7.74	133	75-125	9.18	20	QR-04
Batch 8102322 - EPA 3050B										
Blank (8102322-BLK1)				Prepared & Analyzed: 10/23/18						
Arsenic	ND	0.25	mg/kg							
Beryllium	ND	0.25	"							
Cadmium	ND	0.25	"							
Chromium	ND	0.25	"							
Copper	ND	0.25	"							
Lead	ND	0.25	"							
Mercury	ND	0.025	"							
Nickel	ND	0.25	"							
Selenium	ND	1.2	"							
Manganese	ND	0.25	"							

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102322 - EPA 3050B										
LCS (8102322-BS1)				Prepared: 10/23/18 Analyzed: 10/24/18						
Arsenic	27.3	0.25	mg/kg	25.0		109	80-120			
Cadmium	28.2	0.25	"	25.0		113	80-120			
Chromium	30.0	0.25	"	25.0		120	80-120			
Lead	28.7	0.25	"	25.0		115	80-120			
Duplicate (8102322-DUP1)		**Source: T183211-20**		Prepared & Analyzed: 10/23/18						
Chromium	234	1.2	mg/kg		32.9			151	20	QM-05
Lead	154	1.2	"		16.3			162	20	QM-05
Matrix Spike (8102322-MS1)		**Source: T183211-20**		Prepared & Analyzed: 10/23/18						
Arsenic	46.1	0.25	mg/kg	24.5	15.5	125	75-125			
Cadmium	30.9	0.25	"	24.5	1.76	119	75-125			
Chromium	68.3	0.25	"	24.5	32.9	144	75-125			QM-05
Lead	50.7	0.25	"	24.5	16.3	140	75-125			QM-05
Matrix Spike (8102322-MS2)		**Source: T183211-21**		Prepared & Analyzed: 10/23/18						
Arsenic	44.2	0.25	mg/kg	24.8	13.5	124	75-125			
Cadmium	33.1	0.25	"	24.8	1.75	127	75-125			QM-05
Chromium	73.1	0.25	"	24.8	34.3	157	75-125			QM-05
Lead	42.4	0.25	"	24.8	7.49	141	75-125			QM-05
Matrix Spike Dup (8102322-MSD1)		**Source: T183211-20**		Prepared & Analyzed: 10/23/18						
Arsenic	42.7	0.25	mg/kg	24.0	15.5	113	75-125	7.66	20	
Cadmium	29.2	0.25	"	24.0	1.76	114	75-125	5.88	20	
Chromium	66.7	0.25	"	24.0	32.9	141	75-125	2.37	20	QM-05
Lead	48.4	0.25	"	24.0	16.3	133	75-125	4.63	20	QM-05
Post Spike (8102322-PS1)		**Source: T183211-20**		Prepared & Analyzed: 10/23/18						
Chromium	5.24		mg/kg	25.0	32.9	NR	80-120			QM-05
Lead	2.49		"	25.0	16.3	NR	80-120			QM-05

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102413 - EPA 3050B										
Blank (8102413-BLK1)				Prepared: 10/24/18 Analyzed: 10/25/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8102413-BS1)				Prepared & Analyzed: 10/24/18						
Arsenic	27.2	0.25	mg/kg	25.0		109	80-120			
Lead	28.8	0.25	"	25.0		115	80-120			
Matrix Spike (8102413-MS1)		**Source: T183211-42**		Prepared & Analyzed: 10/24/18						
Arsenic	34.6	0.25	mg/kg	25.0	13.2	85.6	75-125			
Lead	36.4	0.25	"	25.0	14.4	87.7	75-125			
Matrix Spike (8102413-MS2)		**Source: T183211-43**		Prepared & Analyzed: 10/24/18						
Arsenic	37.7	0.25	mg/kg	25.0	13.5	96.6	75-125			
Lead	33.4	0.25	"	25.0	8.04	101	75-125			
Matrix Spike Dup (8102413-MSD1)		**Source: T183211-42**		Prepared & Analyzed: 10/24/18						
Arsenic	39.2	0.25	mg/kg	25.0	13.2	104	75-125	12.6	20	
Lead	40.9	0.25	"	25.0	14.4	106	75-125	11.8	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102319 - EPA 7471A Soil										
Blank (8102319-BLK1)				Prepared & Analyzed: 10/23/18						
Mercury	ND	0.10	mg/kg							
LCS (8102319-BS1)				Prepared & Analyzed: 10/23/18						
Mercury	0.336	0.10	mg/kg	0.417		80.5	80-120			
Matrix Spike (8102319-MS1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Mercury	0.316	0.10	mg/kg	0.417	ND	75.7	75-125			
Matrix Spike Dup (8102319-MSD1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Mercury	0.323	0.10	mg/kg	0.417	ND	77.5	75-125	2.31	20	

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Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102329 - EPA 3550 ECD/GCMS										
Blank (8102329-BLK1)				Prepared: 10/23/18 Analyzed: 10/25/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.55*		*"*	*10.2*		*74.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.12*		*"*	*10.2*		*69.7*	*35-140*			
LCS (8102329-BS1)				Prepared: 10/23/18 Analyzed: 10/25/18						
gamma-BHC (Lindane)	29.1	5.0	ug/kg	40.8		71.3	40-120			
Heptachlor	28.8	5.0	"	40.8		70.7	40-120			
Aldrin	28.0	5.0	"	40.8		68.6	40-120			
Dieldrin	30.3	5.0	"	40.8		74.3	40-120			
Endrin	30.8	5.0	"	40.8		75.4	40-120			
4,4´-DDT	30.8	5.0	"	40.8		75.5	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.37*		*"*	*10.2*		*72.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.01*		*"*	*10.2*		*68.7*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102329 - EPA 3550 ECD/GCMS										
Matrix Spike (8102329-MS1)		**Source: T183211-21**		Prepared: 10/23/18 Analyzed: 10/25/18						
gamma-BHC (Lindane)	30.3	50	ug/kg	39.2	ND	77.3	30-120			
Heptachlor	32.2	50	"	39.2	ND	82.2	30-120			
Aldrin	30.0	50	"	39.2	ND	76.5	30-120			
Dieldrin	31.5	50	"	39.2	ND	80.3	30-120			
Endrin	33.9	50	"	39.2	ND	86.4	30-120			
4,4´-DDT	33.7	50	"	39.2	ND	85.8	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.72*		*"*	*9.80*		*78.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.32*		*"*	*9.80*		*74.7*	*35-140*			
Matrix Spike Dup (8102329-MSD1)		**Source: T183211-21**		Prepared: 10/23/18 Analyzed: 10/25/18						
gamma-BHC (Lindane)	56.8	50	ug/kg	40.4	ND	141	30-120	58.1	30	QR-04
Heptachlor	60.3	50	"	40.4	ND	149	30-120	57.9	30	QR-04
Aldrin	55.0	50	"	40.4	ND	136	30-120	56.1	30	QR-04
Dieldrin	57.9	50	"	40.4	ND	143	30-120	56.3	30	QR-04
Endrin	58.9	50	"	40.4	ND	146	30-120	51.1	30	QR-04
4,4´-DDT	69.5	50	"	40.4	ND	172	30-120	66.8	30	QR-04
Surrogate: Tetrachloro-meta-xylene	*13.6*		*"*	*10.1*		*135*	*35-140*			
Surrogate: Decachlorobiphenyl	*13.9*		*"*	*10.1*		*138*	*35-140*			
Batch 8102332 - EPA 3550 ECD/GCMS										
Blank (8102332-BLK1)				Prepared: 10/23/18 Analyzed: 10/26/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102332 - EPA 3550 ECD/GCMS										
Blank (8102332-BLK1)				Prepared: 10/23/18 Analyzed: 10/26/18						
Endosulfan II	ND	5.0	ug/kg							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*6.30*		*"*	*10.0*		*63.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.73*		*"*	*10.0*		*67.3*	*35-140*			
LCS (8102332-BS1)				Prepared: 10/23/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	25.7	5.0	ug/kg	40.0		64.2	40-120			
Heptachlor	25.8	5.0	"	40.0		64.6	40-120			
Aldrin	25.8	5.0	"	40.0		64.5	40-120			
Dieldrin	26.8	5.0	"	40.0		66.9	40-120			
Endrin	37.6	5.0	"	40.0		93.9	40-120			
4,4´-DDT	20.2	5.0	"	40.0		50.5	33-147			
Surrogate: Tetrachloro-meta-xylene	*6.17*		*"*	*10.0*		*61.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.76*		*"*	*10.0*		*77.6*	*35-140*			
Matrix Spike (8102332-MS1)		**Source: T183211-01**		Prepared: 10/23/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	25.7	5.0	ug/kg	39.6	ND	64.9	30-120			
Heptachlor	26.3	5.0	"	39.6	ND	66.5	30-120			
Aldrin	25.8	5.0	"	39.6	ND	65.3	30-120			
Dieldrin	27.5	5.0	"	39.6	ND	69.5	30-120			
Endrin	27.5	5.0	"	39.6	ND	69.4	30-120			
4,4´-DDT	21.7	5.0	"	39.6	ND	54.9	30-120			
Surrogate: Tetrachloro-meta-xylene	*6.09*		*"*	*9.90*		*61.5*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.29*		*"*	*9.90*		*83.7*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102332 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (8102332-MSD1)		**Source: T183211-01**		Prepared: 10/23/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	28.5	5.0	ug/kg	40.0	ND	71.2	30-120	9.24	30	
Heptachlor	31.3	5.0	"	40.0	ND	78.2	30-120	16.3	30	
Aldrin	28.5	5.0	"	40.0	ND	71.3	30-120	8.88	30	
Dieldrin	30.4	5.0	"	40.0	ND	76.1	30-120	9.07	30	
Endrin	30.6	5.0	"	40.0	ND	76.5	30-120	9.64	30	
4,4´-DDT	32.5	5.0	"	40.0	ND	81.2	30-120	38.6	30	QR-04
Surrogate: Tetrachloro-meta-xylene	*6.74*		*"*	*10.0*		*67.4*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.55*		*"*	*10.0*		*85.5*	*35-140*			
Batch 8102336 - EPA 3550 ECD/GCMS										
Blank (8102336-BLK1)				Prepared: 10/23/18 Analyzed: 10/26/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.72*		*"*	*10.0*		*77.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.10*		*"*	*10.0*		*71.0*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102336 - EPA 3550 ECD/GCMS										
LCS (8102336-BS1)				Prepared: 10/23/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	29.7	5.0	ug/kg	40.0		74.2	40-120			
Heptachlor	29.1	5.0	"	40.0		72.8	40-120			
Aldrin	29.0	5.0	"	40.0		72.4	40-120			
Dieldrin	31.1	5.0	"	40.0		77.8	40-120			
Endrin	31.1	5.0	"	40.0		77.7	40-120			
4,4´-DDT	30.7	5.0	"	40.0		76.8	33-147			
Surrogate: Tetrachloro-meta-xylene	*8.38*		*"*	*10.0*		*83.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.96*		*"*	*10.0*		*79.6*	*35-140*			
Matrix Spike (8102336-MS1)		**Source: T183211-41**		Prepared: 10/23/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	28.7	5.0	ug/kg	39.6	ND	72.5	30-120			
Heptachlor	28.3	5.0	"	39.6	ND	71.3	30-120			
Aldrin	27.2	5.0	"	39.6	ND	68.6	30-120			
Dieldrin	29.8	5.0	"	39.6	ND	75.3	30-120			
Endrin	30.4	5.0	"	39.6	ND	76.8	30-120			
4,4´-DDT	28.5	5.0	"	39.6	ND	72.1	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.51*		*"*	*9.90*		*75.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.09*		*"*	*9.90*		*71.6*	*35-140*			
Matrix Spike Dup (8102336-MSD1)		**Source: T183211-41**		Prepared: 10/23/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	30.3	5.0	ug/kg	39.2	ND	77.3	30-120	6.46	30	
Heptachlor	29.2	5.0	"	39.2	ND	74.4	30-120	4.19	30	
Aldrin	28.5	5.0	"	39.2	ND	72.6	30-120	5.78	30	
Dieldrin	31.2	5.0	"	39.2	ND	79.6	30-120	5.59	30	
Endrin	31.6	5.0	"	39.2	ND	80.6	30-120	4.83	30	
4,4´-DDT	31.0	5.0	"	39.2	ND	79.0	30-120	9.18	30	
Surrogate: Tetrachloro-meta-xylene	*7.94*		*"*	*9.80*		*81.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.50*		*"*	*9.80*		*76.5*	*35-140*			

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Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102420 - EPA 3550 ECD/GCMS										
Blank (8102420-BLK1)				Prepared: 10/24/18 Analyzed: 10/26/18						
PCB-1016	ND	10	ug/kg							
PCB-1221	ND	10	"							
PCB-1232	ND	10	"							
PCB-1242	ND	10	"							
PCB-1248	ND	10	"							
PCB-1254	ND	10	"							
PCB-1260	ND	10	"							
Surrogate: Tetrachloro-meta-xylene	*10.2*		*"*	*9.90*		*103*	*35-140*			
Surrogate: Decachlorobiphenyl	*12.0*		*"*	*9.90*		*121*	*35-140*			
LCS (8102420-BS1)				Prepared: 10/24/18 Analyzed: 10/26/18						
PCB-1016	106	10	ug/kg	99.0		107	40-130			
PCB-1260	109	10	"	99.0		110	40-130			
Surrogate: Tetrachloro-meta-xylene	*8.84*		*"*	*9.90*		*89.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*11.7*		*"*	*9.90*		*118*	*35-140*			
Matrix Spike (8102420-MS1)		**Source: T183211-13**		Prepared: 10/24/18 Analyzed: 10/26/18						
PCB-1016	104	10	ug/kg	99.0	ND	105	40-130			
PCB-1260	104	10	"	99.0	ND	105	40-130			
Surrogate: Tetrachloro-meta-xylene	*8.79*		*"*	*9.90*		*88.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*10.9*		*"*	*9.90*		*110*	*35-140*			
Matrix Spike Dup (8102420-MSD1)		**Source: T183211-13**		Prepared: 10/24/18 Analyzed: 10/26/18						
PCB-1016	107	10	ug/kg	99.0	ND	108	40-130	3.01	30	
PCB-1260	104	10	"	99.0	ND	105	40-130	0.468	30	
Surrogate: Tetrachloro-meta-xylene	*8.74*		*"*	*9.90*		*88.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*10.9*		*"*	*9.90*		*110*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102231 - EPA 5035 GCMS										
Blank (8102231-BLK1)				Prepared & Analyzed: 10/22/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							
1,2-Dichloroethane	ND	5.0	"							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102231 - EPA 5035 GCMS										
Blank (8102231-BLK1)				Prepared & Analyzed: 10/22/18						
p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Surrogate: Toluene-d8	*42.5*		*"*	*39.9*		*106*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*39.9*		*"*	*39.9*		*100*	*85.9-114*			
Surrogate: Dibromofluoromethane	*45.3*		*"*	*39.9*		*114*	*77.8-142*			
LCS (8102231-BS1)				Prepared & Analyzed: 10/22/18						
Chlorobenzene	80.5	5.0	ug/kg	99.8		80.7	75-125			
1,1-Dichloroethene	79.3	5.0	"	99.8		79.5	75-125			
Trichloroethene	75.2	5.0	"	99.8		75.4	75-125			
Benzene	84.2	5.0	"	99.8		84.3	75-125			
Toluene	82.6	5.0	"	99.8		82.8	75-125			
Surrogate: Toluene-d8	*39.1*		*"*	*39.9*		*98.0*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.5*		*"*	*39.9*		*102*	*85.9-114*			
Surrogate: Dibromofluoromethane	*43.8*		*"*	*39.9*		*110*	*77.8-142*			

SunStar Laboratories, Inc.

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Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102231 - EPA 5035 GCMS										
LCS Dup (8102231-BSD1)				Prepared: 10/22/18 Analyzed: 10/23/18						
Chlorobenzene	80.9	5.0	ug/kg	99.8		81.0	75-125	0.421	20	
1,1-Dichloroethene	80.9	5.0	"	99.8		81.1	75-125	1.97	20	
Trichloroethene	85.7	5.0	"	99.8		85.9	75-125	13.0	20	
Benzene	92.4	5.0	"	99.8		92.6	75-125	9.32	20	
Toluene	82.6	5.0	"	99.8		82.8	75-125	0.00	20	
Surrogate: Toluene-d8	*39.6*		*"*	*39.9*		*99.1*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*45.0*		*"*	*39.9*		*113*	*85.9-114*			
Surrogate: Dibromofluoromethane	*41.5*		*"*	*39.9*		*104*	*77.8-142*			

SunStar Laboratories, Inc.

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Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/29/18 14:20

Notes and Definitions

R-07	Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.
QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

Kris Kubota, Project Manager Assistant

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRA PHASE ENGINEERING INC
Address: 18401 VON KARMAN AVE STE 410 IRVINE CA
Phone: (949) 377-2227 Fax:
Project Manager: CLARE STEEDMAN

Date: 10/20/18 Page: 1 Of 8
Project Name: HAMILTON HS
Collector: DP / WS Client Project #: 5030.008.003
Batch #: 718321 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ~~ICP-MS Metals~~ Pb & As	8081 OCPs	8082 PCBs		Laboratory ID #	Comments/Preservative	Total # of containers
B68-0.5	10/20/18	0810	SOIL	1 8oz										X	X			01		
B68-1.5	"	0812	"	"										X	X			02		
B68-2.5	"	0815	"	"										X	X			03		
B91-0.5	"	0830	"	"										X	X			04		
B91-1.5	"	0835	"	"										X	X			05		
B91-2.5	"	0840	"	"										X	X			06		
B92-0.5	"	0842	"	"										X	X			07		
B92-0.5-DUP	"	0842	"	"										X	X			08		
B92-1.5	"	0845	"	"										X	X			09		
B92-1.5-DUP	"	0845	"	"										X	X			10		
B92-2.5	"	0850	"	"										X	X			11		
B92-2.5-DUP	"	0850	"	"										X	X			12		
B51-0.5	"	0930	"	"										X	X	X		13		
B51-0.5-DUP	"	0930	"	"										X	X	X		14		
B51-1.5	"	0940	"	"										X	X	X		15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	10/22/18 1111	[signature]	10-22-18 1111
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	10-22-18 1425	[signature]	10-22-18 1425
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5 4.3/3.2

Turn around time: STD

Notes
Produce EDD in ESDAT Format
Analyze TPH - GRO and TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171041

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave ste. 410 Irvine, CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/20/18 Page: 2 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: 5030.008.003
Batch #: T183211 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ As + Pb	8081 OCPs	8082 PCBs		Laboratory ID #	Comments/Preservative	Total # of containers
B51-1.5-DUP	10/20/18	0940	SOIL	1 802										X	X	X		16		
B13-0.5	"	1025	"	"										X	X			17		
B13-0.5-DUP	"	1025	"	"										X	X			18		
B13-1.5	"	1030	"	"										X	X			19		
B13-2.5	"	1032	"	"										X	X			20		
B15-0.5	"	1050	"	"										X	X	X		21		
B15-1.5	"	1055	"	"										X	X	X		22		
B15-2.5	"	1100	"	"										X	X	X		23		
B26-0.5	"	1105	"	"										X	X			24		
B26-0.5-DUP	"	1105	"	"										X	X			25		
B26-1.5	"	1110	"	"										X	X			26		
B26-1.5-DUP	"	1110	"	"										X	X			27		
B26-2.5	"	1115	"	"										X	X			28		
B26-2.5-DUP	"	1115	"	"										X	X			29		
~~B33-0.5~~		~~1145~~																		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
Relinquished by: (signature) [signature]	10-22-18 1425	Received by: (signature) [signature]	10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5 9.3/3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171047

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave Ste 410 Irvine, CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Stedman

Date: 10/20/18 Page: 3 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: 5030.008.003
Batch #: ~~T183211~~ T183211 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ As + Pb	8081 OCPs	8082 PCBs	~~8270 SVOCs~~	Laboratory ID #	Comments/Preservative	Total # of containers
B32-0.5	10/20/18	1145	SOIL	1 8oz										X	X	X		30		
B32-1.5		1150												X	X	X		31		
B32-2.5		1155												X	X	X		32		
B45-0.5		1200		1 8oz SVOA	X			X				X	X	X	X		X	33	8260, 8015, and 6010 only	
B45-1.5		1210			X			X				X	X	X	X		X	34		
B45-2.5		1215			X			X				X	X	X	X		X	35		
B44-0.5		1320		1 8oz										X	X			36		
B44-1.5		1330												X	X			37		
B44-2.5		1333												X	X			38		
B43-0.5		1340												X	X	X		39		
B43-1.5		1345												X	X	X		40		
B43-2.5		1350												X	X	X		41		
B42-0.5		1400												X	X			42		
B42-0.5		1445												X	X	X		43		
B42-1.5		1450												X	X	X		44		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
[signature]	10-22-18 1425	[signature]	10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 35/43
32

Turn around time: STD

Notes
TPH = Analysis for
TPH - Gasoline
TPH - DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171042

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave ste 410 Irvine, CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/25/18 Page: 4 Of 8
Project Name: Hamilton HS
Collector: DP / WS Client Project #: 5030-008.003
Batch #: 7183211 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals Pb + As	8081 OCPs	8082 PCBs		Laboratory ID #	Comments/Preservative	Total # of containers
B72 - 2.5	10/20/18	1455	Soil	1 8oz										X	X	X		45		
B49 - 0.5	10/20/18	1430	Soil	1 8oz										X	X			46		
B49 - 1.5	10/20/18	1430	Soil	1 8oz										X	X			47		
B49 - 2.5		1430												X	X			48		
B47 - 0.5		1415												X	X			49		
B47 - 1.5		1417												X	X			50		
B47 - 2.5		1418												X	X			51		
B67 - 0.5		1443												X	X			52		
B67 - 1.5		1445												X	X			53		
B67 - 2.5		1447												X	X			54		
B41 - 0.5		1357												X	X			55		
B41 - 1.5		1359												X	X			56		
B41 - 2.5		1401												X	X			57		
B28 - 0.5		1342												X	X			58		
B28 - 1.5		1344												X	X			59		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111		10-22-18 1111
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	10-22-18 1425		10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171043

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T18321

Client Name: TERRAPHASE

Project: HAMILTON AS

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 10.22.18 / 11:11

Lab Received by: SUNNY

Date/Time Lab Received: 10.22.18 / 14:25

Total number of coolers received: 3

Temperature:	Cooler #1 2.3	°C +/- the CF (1.2°C)	= 3.5	°C corrected temperature
Temperature:	Cooler #2 3.1	°C +/- the CF (1.2°C)	= 4.3	°C corrected temperature
Temperature:	Cooler #3 2.0	°C +/- the CF (1.2°C)	= 3.2	°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? ☒ **Yes** ☐ **No**

If NO:

Samples received on ice? ☐ Yes ☐ **No → Complete Non-Conformance Sheet**

If on ice, samples received same day collected? ☐ Yes → Acceptable ☐ **No → Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample ☐ Yes ☐ No* ☒ N/A

Sample containers intact ☒ Yes ☐ No*

Sample labels match Chain of Custody IDs ☒ Yes ☐ No*

Total number of containers received match COC ☒ Yes ☐ No*

Proper containers received for analyses requested on COC ☒ Yes ☐ No*

Proper preservative indicated on COC/containers for analyses requested ☒ Yes ☐ No* ☐ N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times ☒ **Yes** ☐ **No***

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BL 10.22.18

Comments:

SunStar Laboratories

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Sunny Lounethone	Date Logged In:	10/22/18 15:08

Samples Received at:	**4.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T183211-01 B68-0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183211-02 B68-1.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183211-03 B68-2.5 [Soil] Sampled 10/20/18 08:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:15	
T183211-04 B91-0.5 [Soil] Sampled 10/20/18 08:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:30	
T183211-05 B91-1.5 [Soil] Sampled 10/20/18 08:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:35	
T183211-06 B91-2.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-07 B92-0.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183211-08 B92-0.5-DUP [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183211-09 B92-1.5 [Soil] Sampled 10/20/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:45	
T183211-10 B92-1.5-DUP [Soil] Sampled 10/20/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:45	
T183211-11 B92-2.5 [Soil] Sampled 10/20/18 08:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:50	
T183211-12 B92-2.5-DUP [Soil] Sampled 10/20/18 08:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:50	
T183211-13 B51-0.5 [Soil] Sampled 10/20/18 09:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:30	
8082 PCB	10/29/18 15:00	5	11/03/18 09:30	
T183211-14 B51-0.5-DUP [Soil] Sampled 10/20/18 09:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:30	
8082 PCB	10/29/18 15:00	5	11/03/18 09:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-15 B51-1.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
8082 PCB	10/29/18 15:00	5	11/03/18 09:40	
T183211-16 B51-1.5-DUP [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
8082 PCB	10/29/18 15:00	5	11/03/18 09:40	
T183211-17 B13-0.5 [Soil] Sampled 10/20/18 10:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:25	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:25	
T183211-18 B13-0.5-DUP [Soil] Sampled 10/20/18 10:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:25	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:25	
T183211-19 B13-1.5 [Soil] Sampled 10/20/18 10:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:30	
T183211-20 B13-2.5 [Soil] Sampled 10/20/18 10:32 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:32	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:32	
T183211-21 B15-0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
8082 PCB	10/29/18 15:00	5	11/03/18 10:50	
T183211-22 B15-1.5 [Soil] Sampled 10/20/18 10:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:55	
8082 PCB	10/29/18 15:00	5	11/03/18 10:55	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-23 B15-2.5 [Soil] Sampled 10/20/18 11:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:00	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:00	
8082 PCB	10/29/18 15:00	5	11/03/18 11:00	
T183211-24 B26-0.5 [Soil] Sampled 10/20/18 11:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:05	
T183211-25 B26-0.5-DUP [Soil] Sampled 10/20/18 11:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:05	
T183211-26 B26-1.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183211-27 B26-1.5-DUP [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183211-28 B26-2.5 [Soil] Sampled 10/20/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:15	
T183211-29 B26-2.5-DUP [Soil] Sampled 10/20/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:15	
T183211-30 B32-0.5 [Soil] Sampled 10/20/18 11:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:45	
8082 PCB	10/29/18 15:00	5	11/03/18 11:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-31 B32-1.5 [Soil] Sampled 10/20/18 11:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:50	
8082 PCB	10/29/18 15:00	5	11/03/18 11:50	
T183211-32 B32-2.5 [Soil] Sampled 10/20/18 11:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:55	
8082 PCB	10/29/18 15:00	5	11/03/18 11:55	
T183211-33 B45-0.5 [Soil] Sampled 10/20/18 12:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:00	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:00	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:00	
8260 5035	10/29/18 15:00	5	11/03/18 12:00	
T183211-34 B45-1.5 [Soil] Sampled 10/20/18 12:10 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:10	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:10	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:10	
8260 5035	10/29/18 15:00	5	11/03/18 12:10	
T183211-35 B45-2.5 [Soil] Sampled 10/20/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:15	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:15	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:15	
8260 5035	10/29/18 15:00	5	11/03/18 12:15	
T183211-36 B44-0.5 [Soil] Sampled 10/20/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:20	
T183211-37 B44-1.5 [Soil] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-38 B44-2.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183211-39 B43-0.5 [Soil] Sampled 10/20/18 13:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:40	
8082 PCB	10/29/18 15:00	5	11/03/18 13:40	
T183211-40 B43-1.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
8082 PCB	10/29/18 15:00	5	11/03/18 13:45	
T183211-41 B43-2.5 [Soil] Sampled 10/20/18 13:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:50	
8082 PCB	10/29/18 15:00	5	11/03/18 13:50	
T183211-42 B42-0.5 [Soil] Sampled 10/20/18 14:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:00	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:00	
T183211-43 B72-0.5 [Soil] Sampled 10/20/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:45	
8082 PCB	10/29/18 15:00	5	11/03/18 14:45	
T183211-44 B72-1.5 [Soil] Sampled 10/20/18 14:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:50	
8082 PCB	10/29/18 15:00	5	11/03/18 14:50	
T183211-45 B72-2.5 [Soil] Sampled 10/20/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:55	
8082 PCB	10/29/18 15:00	5	11/03/18 14:55	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-46 B49-0.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-47 B49-1.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-48 B49-2.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-49 B47-0.5 [Soil] Sampled 10/20/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:15	
T183211-50 B47-1.5 [Soil] Sampled 10/20/18 14:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:17	
T183211-51 B47-2.5 [Soil] Sampled 10/20/18 14:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:18	
T183211-52 B67-0.5 [Soil] Sampled 10/20/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:43	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:43	
T183211-53 B67-1.5 [Soil] Sampled 10/20/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:45	
T183211-54 B67-2.5 [Soil] Sampled 10/20/18 14:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:47	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:47	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **5030.008.003**

Analysis	Due	TAT	Expires	Comments
T183211-55 B41-0.5 [Soil] Sampled 10/20/18 13:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:57	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:57	
T183211-56 B41-1.5 [Soil] Sampled 10/20/18 13:59 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:59	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:59	
T183211-57 B41-2.5 [Soil] Sampled 10/20/18 14:01 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:01	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:01	
T183211-58 B28-0.5 [Soil] Sampled 10/20/18 13:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:42	
T183211-59 B28-1.5 [Soil] Sampled 10/20/18 13:44 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:44	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:44	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

28 November 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 14:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi For Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B91-1.5	T183211-05	Soil	10/20/18 08:35	10/22/18 14:25

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:06

DETECTIONS SUMMARY

Sample ID: B91-1.5 **Laboratory ID:** T183211-05

No Results Detected

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:06

B91-1.5

T183211-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
STLC Metals by 6000/7000 Series Methods									
Lead	ND	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:06

STLC Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8111923 - STLC Metals										
Blank (8111923-BLK1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	ND	0.10	mg/l							
Arsenic	ND	0.10	"							
LCS (8111923-BS1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	9.57	0.10	mg/l	10.0		95.7	75-125			
Arsenic	10.9	0.10	"	10.0		109	75-125			
Matrix Spike (8111923-MS1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.4	0.10	mg/l	10.0	3.56	88.2	75-125			
Arsenic	10.1	0.10	"	10.0	0.846	92.5	75-125			
Matrix Spike Dup (8111923-MSD1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.6	0.10	mg/l	10.0	3.56	90.3	75-125	1.64	30	
Arsenic	10.8	0.10	"	10.0	0.846	99.4	75-125	6.61	30	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:06

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: TERRA PHASE ENGINEERING INC
Address: 18401 VON KARMAN AVE STE 410 IRVINE CA
Phone: (949) 377-2227 Fax:
Project Manager: CLARE STEEDMAN

Date: 10/20/18 Page: 1 Of 8
Project Name: HAMILTON HS
Collector: DP / WS Client Project #: 5030.008.003
Batch #: 718321 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ~~ICP-MS Metals~~ Pb & As	8081 OCPs	8082 PCBs		Laboratory ID #	Comments/Preservative	Total # of containers
B68-0.5	10/20/18	0810	SOIL	1 8oz										X	X			01		
B68-1.5	"	0812	"	"										X	X			02		
B68-2.5	"	0815	"	"										X	X			03		
B91-0.5	"	0830	"	"										X	X			04		
B91-1.5	"	0835	"	"										X	X			05		
B91-2.5	"	0840	"	"										X	X			06		
B92-0.5	"	0842	"	"										X	X			07		
B92-0.5-DUP	"	0842	"	"										X	X			08		
B92-1.5	"	0845	"	"										X	X			09		
B92-1.5-DUP	"	0845	"	"										X	X			10		
B92-2.5	"	0850	"	"										X	X			11		
B92-2.5-DUP	"	0850	"	"										X	X			12		
B51-0.5	"	0930	"	"										X	X	X		13		
B51-0.5-DUP	"	0930	"	"										X	X	X		14		
B51-1.5	"	0940	"	"										X	X	X		15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	10/22/18 1111	[signature]	10-22-18 1111
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	10-22-18 1425	[signature]	10-22-18 1425
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5 4.3/3.2

Turn around time: STD

Notes
Produce EDD in ESDAT Format
Analyze TPH - GRO and TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171041

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave ste. 410 Irvine, CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/20/18 Page: 2 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: 5030.008.003
Batch #: T183211 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ As + Pb	8081 OCPs	8082 PCBs		Laboratory ID #	Comments/Preservative	Total # of containers
B51-1.5-DUP	10/20/18	0940	SOIL	1 802										X	X	X		16		
B13-0.5	"	1025	"	"										X	X			17		
B13-0.5-DUP	"	1025	"	"										X	X			18		
B13-1.5	"	1030	"	"										X	X			19		
B13-2.5	"	1032	"	"										X	X			20		
B15-0.5	"	1050	"	"										X	X	X		21		
B15-1.5	"	1055	"	"										X	X	X		22		
B15-2.5	"	1100	"	"										X	X	X		23		
B26-0.5	"	1105	"	"										X	X			24		
B26-0.5-DUP	"	1105	"	"										X	X			25		
B26-1.5	"	1110	"	"										X	X			26		
B26-1.5-DUP	"	1110	"	"										X	X			27		
B26-2.5	"	1115	"	"										X	X			28		
B26-2.5-DUP	"	1115	"	"										X	X			29		
~~B33-0.5~~		~~1145~~																		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
Relinquished by: (signature) [signature]	10-22-18 1425	Received by: (signature) [signature]	10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5 9.3/3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171047

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave Ste 410 Irvine, CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Stedman

Date: 10/20/18 Page: 3 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: 5030.008.003
Batch #: ~~T183211~~ T183211 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ As + Pb	8081 OCPs	8082 PCBs	~~8270 SVOCs~~	Laboratory ID #	Comments/Preservative	Total # of containers
B32-0.5	10/20/18	1145	SOIL	1 8oz										X	X	X		30		
B32-1.5		1150												X	X	X		31		
B32-2.5		1155												X	X	X		32		
B45-0.5		1200		1 8oz SVOA	X			X				X	X	X	X		X	33	8260, 8015, and 6010 only	
B45-1.5		1210			X			X				X	X	X	X		X	34		
B45-2.5		1215			X			X				X	X	X	X		X	35		
B44-0.5		1320		1 8oz										X	X			36		
B44-1.5		1330												X	X			37		
B44-2.5		1333												X	X			38		
B43-0.5		1340												X	X	X		39		
B43-1.5		1345												X	X	X		40		
B43-2.5		1350												X	X	X		41		
B42-0.5		1400												X	X			42		
B42-0.5		1445												X	X	X		43		
B42-1.5		1450												X	X	X		44		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
[signature]	10-22-18 1425	[signature]	10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 35/43
32

Turn around time: STD

Notes
TPH = Analysis for
TPH - Gasoline
TPH - DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171042

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave ste 410 Irvine, CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/25/18 Page: 4 Of 8
Project Name: Hamilton HS
Collector: DP / WS Client Project #: 5030-008.003
Batch #: 7183211 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals Pb + As	8081 OCPs	8082 PCBs		Laboratory ID #	Comments/Preservative	Total # of containers
B72 - 2.5	10/20/18	1455	Soil	1 8oz										X	X	X		45		
B49 - 0.5	10/20/18	1430	Soil	1 8oz										X	X			46		
B49 - 1.5	10/20/18	1430	Soil	1 8oz										X	X			47		
B49 - 2.5		1430												X	X			48		
B47 - 0.5		1415												X	X			49		
B47 - 1.5		1417												X	X			50		
B47 - 2.5		1418												X	X			51		
B67 - 0.5		1443												X	X			52		
B67 - 1.5		1445												X	X			53		
B67 - 2.5		1447												X	X			54		
B41 - 0.5		1357												X	X			55		
B41 - 1.5		1359												X	X			56		
B41 - 2.5		1401												X	X			57		
B28 - 0.5		1342												X	X			58		
B28 - 1.5		1344												X	X			59		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111		10-22-18 1111
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	10-22-18 1425		10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171043

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T18321

Client Name: TERRAPHASE

Project: HAMILTON AS

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN

Date/Time Courier Received: 10.22.18 / 11:11

Lab Received by: SUNNY

Date/Time Lab Received: 10.22.18 / 14:25

Total number of coolers received: 3

Temperature:	Cooler #1 2.3	°C +/- the CF (1.2°C)	= 3.5	°C corrected temperature
Temperature:	Cooler #2 3.1	°C +/- the CF (1.2°C)	= 4.3	°C corrected temperature
Temperature:	Cooler #3 2.0	°C +/- the CF (1.2°C)	= 3.2	°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? ☒ **Yes** ☐ **No**

If NO:

Samples received on ice? ☐ Yes ☐ **No → Complete Non-Conformance Sheet**

If on ice, samples received same day collected? ☐ Yes → Acceptable ☐ **No → Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample ☐ Yes ☐ No* ☒ N/A

Sample containers intact ☒ Yes ☐ No*

Sample labels match Chain of Custody IDs ☒ Yes ☐ No*

Total number of containers received match COC ☒ Yes ☐ No*

Proper containers received for analyses requested on COC ☒ Yes ☐ No*

Proper preservative indicated on COC/containers for analyses requested ☒ Yes ☐ No* ☐ N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times ☒ **Yes** ☐ **No***

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BL 10.22.18

Comments:

SunStar Laboratories

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

From: Rose Fasheh [Rose@sunstarlabs.com]
Sent: Monday, November 19, 2018 11:37 AM
To: 'Clare Steedman'
Cc: 'Mike'
Subject: Additional Request: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898
Attachments: T182803_WKO_02.pdf; T182898_WKO_02.pdf; T183211_WKO_02.pdf; T183212_WKO_03.pdf

Clare,

Please find attached revised work orders reflecting the additional STLC testing. Details are documented in the comments section (right hand side). We will have the additional STLC results for you before end of day Wednesday 11/28 as a standard 5-day TAT.

Let us know if you need anything else!

Happy Thanksgiving ☺

Rose Fasheh
Project Manager

SunStar Laboratories

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
Please note that SunStar Laboratories will be observing the Thanksgiving Holidays on Thursday and Friday, November 22nd and 23rd. In addition, GSO will not have scheduled service on Thursday, November 22nd. If you have any short hold samples arriving near or during these days, please contact your Project Manager in advance to ensure all holding times are met for your samples. SunStar will be available on Saturday, November 24th if needed to receive samples. Please let your Project Manager know if you will ship or deliver samples on this day.

We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:19 AM
To: Rose Fasheh
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Rose,

Thanks for the heads up. Standard turn is fine.

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Rose Fasheh <Rose@sunstarlabs.com>
Sent: Monday, November 19, 2018 11:18 AM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Good morning Clare,

Kris no longer works with SunStar, but I will go ahead and get those going for you. Is a standard 5-day TAT okay, or did you need the results expedited?

Thank you,

Rose Fasheh
Project Manager

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
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We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:12 AM
To: kris@sunstarlabs.com
Subject: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Kris,

Would you please analyze the following samples for **STLC** analysis?

B03-1.5 (T182803-28) for lead
B10-0.5 (T182803-42) for lead

B91-1.5 (T183211-05) for lead

B12-0.5 (T183212-17) for lead
B25-05 (T183212-14) for lead

B18-2.5 (T182898-28) for arsenic

Thank you,

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Sunny Lounethone	Date Logged In:	10/22/18 15:08

Samples Received at:	**4.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T183211-01 B68-0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183211-02 B68-1.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183211-03 B68-2.5 [Soil] Sampled 10/20/18 08:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:15	
T183211-04 B91-0.5 [Soil] Sampled 10/20/18 08:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:30	
T183211-05 B91-1.5 [Soil] Sampled 10/20/18 08:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:35	
T183211-06 B91-2.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-07 B92-0.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183211-08 B92-0.5-DUP [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183211-09 B92-1.5 [Soil] Sampled 10/20/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:45	
T183211-10 B92-1.5-DUP [Soil] Sampled 10/20/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:45	
T183211-11 B92-2.5 [Soil] Sampled 10/20/18 08:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:50	
T183211-12 B92-2.5-DUP [Soil] Sampled 10/20/18 08:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:50	
T183211-13 B51-0.5 [Soil] Sampled 10/20/18 09:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:30	
8082 PCB	10/29/18 15:00	5	11/03/18 09:30	
T183211-14 B51-0.5-DUP [Soil] Sampled 10/20/18 09:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:30	
8082 PCB	10/29/18 15:00	5	11/03/18 09:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-15 B51-1.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
8082 PCB	10/29/18 15:00	5	11/03/18 09:40	
T183211-16 B51-1.5-DUP [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
8082 PCB	10/29/18 15:00	5	11/03/18 09:40	
T183211-17 B13-0.5 [Soil] Sampled 10/20/18 10:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:25	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:25	
T183211-18 B13-0.5-DUP [Soil] Sampled 10/20/18 10:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:25	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:25	
T183211-19 B13-1.5 [Soil] Sampled 10/20/18 10:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:30	
T183211-20 B13-2.5 [Soil] Sampled 10/20/18 10:32 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:32	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:32	
T183211-21 B15-0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
8082 PCB	10/29/18 15:00	5	11/03/18 10:50	
T183211-22 B15-1.5 [Soil] Sampled 10/20/18 10:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:55	
8082 PCB	10/29/18 15:00	5	11/03/18 10:55	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-23 B15-2.5 [Soil] Sampled 10/20/18 11:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:00	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:00	
8082 PCB	10/29/18 15:00	5	11/03/18 11:00	
T183211-24 B26-0.5 [Soil] Sampled 10/20/18 11:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:05	
T183211-25 B26-0.5-DUP [Soil] Sampled 10/20/18 11:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:05	
T183211-26 B26-1.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183211-27 B26-1.5-DUP [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183211-28 B26-2.5 [Soil] Sampled 10/20/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:15	
T183211-29 B26-2.5-DUP [Soil] Sampled 10/20/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:15	
T183211-30 B32-0.5 [Soil] Sampled 10/20/18 11:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:45	
8082 PCB	10/29/18 15:00	5	11/03/18 11:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-31 B32-1.5 [Soil] Sampled 10/20/18 11:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:50	
8082 PCB	10/29/18 15:00	5	11/03/18 11:50	
T183211-32 B32-2.5 [Soil] Sampled 10/20/18 11:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:55	
8082 PCB	10/29/18 15:00	5	11/03/18 11:55	
T183211-33 B45-0.5 [Soil] Sampled 10/20/18 12:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:00	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:00	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:00	
8260 5035	10/29/18 15:00	5	11/03/18 12:00	
T183211-34 B45-1.5 [Soil] Sampled 10/20/18 12:10 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:10	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:10	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:10	
8260 5035	10/29/18 15:00	5	11/03/18 12:10	
T183211-35 B45-2.5 [Soil] Sampled 10/20/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:15	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:15	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:15	
8260 5035	10/29/18 15:00	5	11/03/18 12:15	
T183211-36 B44-0.5 [Soil] Sampled 10/20/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:20	
T183211-37 B44-1.5 [Soil] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-38 B44-2.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183211-39 B43-0.5 [Soil] Sampled 10/20/18 13:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:40	
8082 PCB	10/29/18 15:00	5	11/03/18 13:40	
T183211-40 B43-1.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
8082 PCB	10/29/18 15:00	5	11/03/18 13:45	
T183211-41 B43-2.5 [Soil] Sampled 10/20/18 13:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:50	
8082 PCB	10/29/18 15:00	5	11/03/18 13:50	
T183211-42 B42-0.5 [Soil] Sampled 10/20/18 14:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:00	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:00	
T183211-43 B72-0.5 [Soil] Sampled 10/20/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:45	
8082 PCB	10/29/18 15:00	5	11/03/18 14:45	
T183211-44 B72-1.5 [Soil] Sampled 10/20/18 14:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:50	
8082 PCB	10/29/18 15:00	5	11/03/18 14:50	
T183211-45 B72-2.5 [Soil] Sampled 10/20/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:55	
8082 PCB	10/29/18 15:00	5	11/03/18 14:55	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-46 B49-0.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-47 B49-1.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-48 B49-2.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-49 B47-0.5 [Soil] Sampled 10/20/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:15	
T183211-50 B47-1.5 [Soil] Sampled 10/20/18 14:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:17	
T183211-51 B47-2.5 [Soil] Sampled 10/20/18 14:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:18	
T183211-52 B67-0.5 [Soil] Sampled 10/20/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:43	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:43	
T183211-53 B67-1.5 [Soil] Sampled 10/20/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:45	
T183211-54 B67-2.5 [Soil] Sampled 10/20/18 14:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:47	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:47	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **5030.008.003**

Analysis	Due	TAT	Expires	Comments
T183211-55 B41-0.5 [Soil] Sampled 10/20/18 13:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:57	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:57	
T183211-56 B41-1.5 [Soil] Sampled 10/20/18 13:59 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:59	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:59	
T183211-57 B41-2.5 [Soil] Sampled 10/20/18 14:01 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:01	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:01	
T183211-58 B28-0.5 [Soil] Sampled 10/20/18 13:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:42	
T183211-59 B28-1.5 [Soil] Sampled 10/20/18 13:44 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:44	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:44	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/19/2018 11:27:26AM

WORK ORDER

T183211

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Sunny Lounethone	Date Logged In:	10/22/18 15:08

Samples Received at:	**4.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T183211-01 B68-0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183211-02 B68-1.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183211-03 B68-2.5 [Soil] Sampled 10/20/18 08:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:15	
T183211-04 B91-0.5 [Soil] Sampled 10/20/18 08:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:30	
T183211-05 B91-1.5 [Soil] Sampled 10/20/18 08:35 (GMT-08:00) Pacific Time (US &				**STLC for Lead added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:35	
STLC Pb	11/28/18 15:00	5	04/18/19 08:35	
STLC Leaching Procedure Metals	11/28/18 15:00	5	11/03/18 08:35	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-06 B91-2.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183211-07 B92-0.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183211-08 B92-0.5-DUP [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183211-09 B92-1.5 [Soil] Sampled 10/20/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:45	
T183211-10 B92-1.5-DUP [Soil] Sampled 10/20/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:45	
T183211-11 B92-2.5 [Soil] Sampled 10/20/18 08:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:50	
T183211-12 B92-2.5-DUP [Soil] Sampled 10/20/18 08:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:50	
T183211-13 B51-0.5 [Soil] Sampled 10/20/18 09:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:30	
8082 PCB	10/29/18 15:00	5	11/03/18 09:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-14 B51-0.5-DUP [Soil] Sampled 10/20/18 09:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:30	
8082 PCB	10/29/18 15:00	5	11/03/18 09:30	
T183211-15 B51-1.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
8082 PCB	10/29/18 15:00	5	11/03/18 09:40	
T183211-16 B51-1.5-DUP [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
8082 PCB	10/29/18 15:00	5	11/03/18 09:40	
T183211-17 B13-0.5 [Soil] Sampled 10/20/18 10:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:25	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:25	
T183211-18 B13-0.5-DUP [Soil] Sampled 10/20/18 10:25 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:25	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:25	
T183211-19 B13-1.5 [Soil] Sampled 10/20/18 10:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:30	
T183211-20 B13-2.5 [Soil] Sampled 10/20/18 10:32 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:32	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:32	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-21 B15-0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
8082 PCB	10/29/18 15:00	5	11/03/18 10:50	
T183211-22 B15-1.5 [Soil] Sampled 10/20/18 10:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:55	
8082 PCB	10/29/18 15:00	5	11/03/18 10:55	
T183211-23 B15-2.5 [Soil] Sampled 10/20/18 11:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:00	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:00	
8082 PCB	10/29/18 15:00	5	11/03/18 11:00	
T183211-24 B26-0.5 [Soil] Sampled 10/20/18 11:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:05	
T183211-25 B26-0.5-DUP [Soil] Sampled 10/20/18 11:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:05	
T183211-26 B26-1.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183211-27 B26-1.5-DUP [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-28 B26-2.5 [Soil] Sampled 10/20/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:15	
T183211-29 B26-2.5-DUP [Soil] Sampled 10/20/18 11:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:15	
T183211-30 B32-0.5 [Soil] Sampled 10/20/18 11:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:45	
8082 PCB	10/29/18 15:00	5	11/03/18 11:45	
T183211-31 B32-1.5 [Soil] Sampled 10/20/18 11:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:50	
8082 PCB	10/29/18 15:00	5	11/03/18 11:50	
T183211-32 B32-2.5 [Soil] Sampled 10/20/18 11:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:55	
8082 PCB	10/29/18 15:00	5	11/03/18 11:55	
T183211-33 B45-0.5 [Soil] Sampled 10/20/18 12:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:00	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:00	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:00	
8260 5035	10/29/18 15:00	5	11/03/18 12:00	
T183211-34 B45-1.5 [Soil] Sampled 10/20/18 12:10 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:10	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:10	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:10	
8260 5035	10/29/18 15:00	5	11/03/18 12:10	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-35 B45-2.5 [Soil] Sampled 10/20/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:15	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:15	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:15	
8260 5035	10/29/18 15:00	5	11/03/18 12:15	
T183211-36 B44-0.5 [Soil] Sampled 10/20/18 13:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:20	
T183211-37 B44-1.5 [Soil] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:30	
T183211-38 B44-2.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183211-39 B43-0.5 [Soil] Sampled 10/20/18 13:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:40	
8082 PCB	10/29/18 15:00	5	11/03/18 13:40	
T183211-40 B43-1.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
8082 PCB	10/29/18 15:00	5	11/03/18 13:45	
T183211-41 B43-2.5 [Soil] Sampled 10/20/18 13:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:50	
8082 PCB	10/29/18 15:00	5	11/03/18 13:50	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Analysis	Due	TAT	Expires	Comments
T183211-42 B42-0.5 [Soil] Sampled 10/20/18 14:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:00	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:00	
T183211-43 B72-0.5 [Soil] Sampled 10/20/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:45	
8082 PCB	10/29/18 15:00	5	11/03/18 14:45	
T183211-44 B72-1.5 [Soil] Sampled 10/20/18 14:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:50	
8082 PCB	10/29/18 15:00	5	11/03/18 14:50	
T183211-45 B72-2.5 [Soil] Sampled 10/20/18 14:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:55	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:55	
8082 PCB	10/29/18 15:00	5	11/03/18 14:55	
T183211-46 B49-0.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-47 B49-1.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	
T183211-48 B49-2.5 [Soil] Sampled 10/20/18 14:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:30	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:30	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183211-49 B47-0.5 [Soil] Sampled 10/20/18 14:15 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:15	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:15	
T183211-50 B47-1.5 [Soil] Sampled 10/20/18 14:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:17	
T183211-51 B47-2.5 [Soil] Sampled 10/20/18 14:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:18	
T183211-52 B67-0.5 [Soil] Sampled 10/20/18 14:43 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:43	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:43	
T183211-53 B67-1.5 [Soil] Sampled 10/20/18 14:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:45	
T183211-54 B67-2.5 [Soil] Sampled 10/20/18 14:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:47	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:47	
T183211-55 B41-0.5 [Soil] Sampled 10/20/18 13:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:57	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:57	
T183211-56 B41-1.5 [Soil] Sampled 10/20/18 13:59 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:59	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:59	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183211

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Kris Kubota**
Project: **Hamilton Highschool** **Project Number:** **5030.008.003**

Analysis	Due	TAT	Expires	Comments
T183211-57 B41-2.5 [Soil] Sampled 10/20/18 14:01 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 14:01	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 14:01	
T183211-58 B28-0.5 [Soil] Sampled 10/20/18 13:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:42	
T183211-59 B28-1.5 [Soil] Sampled 10/20/18 13:44 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:44	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:44	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

30 October 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 14:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B28-2.5	T183212-01	Soil	10/20/18 13:45	10/22/18 14:25
B29-0.5	T183212-02	Soil	10/20/18 13:33	10/22/18 14:25
B29-1.5	T183212-03	Soil	10/20/18 13:34	10/22/18 14:25
B29-2.5	T183212-04	Soil	10/20/18 13:35	10/22/18 14:25
B31-0.5-dup	T183212-05	Soil	10/20/18 13:21	10/22/18 14:25
B31- 1.5-dup	T183212-06	Soil	10/20/18 13:22	10/22/18 14:25
B31- 2.5-dup	T183212-07	Soil	10/20/18 13:24	10/22/18 14:25
B31- 0.5	T183212-08	Soil	10/20/18 13:21	10/22/18 14:25
B31- 1.5	T183212-09	Soil	10/20/18 13:22	10/22/18 14:25
B31- 2.5	T183212-10	Soil	10/20/18 13:24	10/22/18 14:25
B14- 0.5	T183212-11	Soil	10/20/18 10:35	10/22/18 14:25
B14- 1.5	T183212-12	Soil	10/20/18 10:36	10/22/18 14:25
B14- 2.5	T183212-13	Soil	10/20/18 10:37	10/22/18 14:25
B25- 0.5	T183212-14	Soil	10/20/18 11:10	10/22/18 14:25
B25-1.5	T183212-15	Soil	10/20/18 11:11	10/22/18 14:25
B25- 2.5	T183212-16	Soil	10/20/18 11:12	10/22/18 14:25
B12- 0.5	T183212-17	Soil	10/20/18 10:20	10/22/18 14:25
B12- 1.5	T183212-18	Soil	10/20/18 10:21	10/22/18 14:25
B12- 2.5	T183212-19	Soil	10/20/18 10:22	10/22/18 14:25
B52-0.5	T183212-20	Soil	10/20/18 09:05	10/22/18 14:25
B52- 1.5	T183212-21	Soil	10/20/18 09:06	10/22/18 14:25
B52- 2.5	T183212-22	Soil	10/20/18 09:07	10/22/18 14:25
B30- 0.5	T183212-23	Soil	10/20/18 10:50	10/22/18 14:25
B30- 1.5	T183212-24	Soil	10/20/18 10:51	10/22/18 14:25
B30- 2.5	T183212-25	Soil	10/20/18 10:52	10/22/18 14:25
B19-0.5-dup	T183212-26	Soil	10/20/18 09:40	10/22/18 14:25

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B19- 1.5-dup	T183212-27	Soil	10/20/18 09:41	10/22/18 14:25
B19- 2.5 dup	T183212-28	Soil	10/20/18 09:42	10/22/18 14:25
B11- 0.5	T183212-29	Soil	10/20/18 09:20	10/22/18 14:25
B11- 1.5	T183212-30	Soil	10/20/18 09:21	10/22/18 14:25
B11- 2.5	T183212-31	Soil	10/20/18 09:22	10/22/18 14:25
B69- 0.5	T183212-32	Soil	10/20/18 08:10	10/22/18 14:25
B69- 1.5	T183212-33	Soil	10/20/18 08:11	10/22/18 14:25
B69- 2.5	T183212-34	Soil	10/20/18 08:12	10/22/18 14:25
B19- 0.5	T183212-35	Soil	10/20/18 09:40	10/22/18 14:25
B19- 1.5	T183212-36	Soil	10/20/18 09:41	10/22/18 14:25
B19- 2.5	T183212-37	Soil	10/20/18 09:42	10/22/18 14:25
B90- 0.5	T183212-38	Soil	10/20/18 08:17	10/22/18 14:25
B90- 1.5	T183212-39	Soil	10/20/18 08:18	10/22/18 14:25
B90- 2.5	T183212-40	Soil	10/20/18 08:19	10/22/18 14:25
B93- 0.5	T183212-41	Soil	10/20/18 08:40	10/22/18 14:25
B93- 1.5	T183212-42	Soil	10/20/18 08:41	10/22/18 14:25
B93- 2.5	T183212-43	Soil	10/20/18 08:42	10/22/18 14:25
B46- 0.5	T183212-44	Soil	10/20/18 12:30	10/22/18 14:25
B46- 0.5 dup	T183212-45	Soil	10/20/18 12:30	10/22/18 14:25
B46- 1.5	T183212-46	Soil	10/20/18 12:32	10/22/18 14:25
B46- 1.5 dup	T183212-47	Soil	10/20/18 12:32	10/22/18 14:25
B46- 2.5	T183212-48	Soil	10/20/18 12:36	10/22/18 14:25
B46- 2.5 dup	T183212-49	Soil	10/20/18 12:36	10/22/18 14:25
EB-04	T183212-50	Water	10/20/18 13:30	10/22/18 14:25

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

DETECTIONS SUMMARY

Sample ID: B28-2.5 **Laboratory ID:** T183212-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B29-0.5 **Laboratory ID:** T183212-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B29-1.5 **Laboratory ID:** T183212-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**12**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B29-2.5 **Laboratory ID:** T183212-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B31-0.5-dup **Laboratory ID:** T183212-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**41**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B31- 1.5-dup **Laboratory ID:** T183212-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B31- 2.5-dup **Laboratory ID:** T183212-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B31- 0.5 **Laboratory ID:** T183212-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**31**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B31- 1.5 **Laboratory ID:** T183212-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B31- 2.5 **Laboratory ID:** T183212-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B14- 0.5 **Laboratory ID:** T183212-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.6**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B14- 1.5 **Laboratory ID:** T183212-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B14- 2.5 **Laboratory ID:** T183212-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B25- 0.5 **Laboratory ID:** T183212-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.0**	0.25	mg/kg	6020 ICP-MS	
Lead	**130**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B25-1.5 **Laboratory ID:** T183212-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B25- 2.5 **Laboratory ID:** T183212-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.2**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B12- 0.5 **Laboratory ID:** T183212-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.3**	0.25	mg/kg	6020 ICP-MS	
Lead	**270**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B12- 1.5 **Laboratory ID:** T183212-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B12- 2.5 **Laboratory ID:** T183212-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B52-0.5 **Laboratory ID:** T183212-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**13**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B52- 1.5 **Laboratory ID:** T183212-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**12**	0.25	mg/kg	6020 ICP-MS	
Lead	**17**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B52- 2.5 **Laboratory ID:** T183212-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**12**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B30- 0.5 **Laboratory ID:** T183212-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**13**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B30- 1.5 **Laboratory ID:** T183212-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B30- 2.5 **Laboratory ID:** T183212-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B19-0.5-dup **Laboratory ID:** T183212-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**16**	0.25	mg/kg	6020 ICP-MS	
gamma-Chlordane	**8.9**	5.0	ug/kg	EPA 8081A	
alpha-Chlordane	**8.7**	5.0	ug/kg	EPA 8081A	

Sample ID: B19- 1.5-dup **Laboratory ID:** T183212-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B19- 2.5 dup **Laboratory ID:** T183212-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B11- 0.5 **Laboratory ID:** T183212-29

Analyte	Result	Reporting Limit	Units	Method	Notes

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Sample ID: B11- 0.5 **Laboratory ID:** T183212-29

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**21**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.9**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**40**	5.0	ug/kg	EPA 8081A	

Sample ID: B11- 1.5 **Laboratory ID:** T183212-30

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**37**	0.25	mg/kg	6020 ICP-MS	
Lead	**34**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**140**	25	ug/kg	EPA 8081A	

Sample ID: B11- 2.5 **Laboratory ID:** T183212-31

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**44**	0.25	mg/kg	6020 ICP-MS	
Lead	**40**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**160**	25	ug/kg	EPA 8081A	

Sample ID: B69- 0.5 **Laboratory ID:** T183212-32

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**13**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**13**	5.0	ug/kg	EPA 8081A	

Sample ID: B69- 1.5 **Laboratory ID:** T183212-33

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.0**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B69- 2.5 **Laboratory ID:** T183212-34

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.6**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B19- 0.5 **Laboratory ID:** T183212-35

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	0.25	mg/kg	6020 ICP-MS	
Lead	**18**	0.25	mg/kg	6020 ICP-MS	
gamma-Chlordane	**6.1**	5.0	ug/kg	EPA 8081A	
alpha-Chlordane	**6.9**	5.0	ug/kg	EPA 8081A	

Sample ID: B19- 1.5 **Laboratory ID:** T183212-36

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B19- 2.5 **Laboratory ID:** T183212-37

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B90- 0.5 **Laboratory ID:** T183212-38

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**53**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**290**	50	ug/kg	EPA 8081A	

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Sample ID: B90- 1.5 **Laboratory ID:** T183212-39

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**28**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**52**	5.0	ug/kg	EPA 8081A	

Sample ID: B90- 2.5 **Laboratory ID:** T183212-40

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**38**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**80**	5.0	ug/kg	EPA 8081A	
4,4´-DDD	**7.0**	5.0	ug/kg	EPA 8081A	

Sample ID: B93- 0.5 **Laboratory ID:** T183212-41

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**37**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**120**	25	ug/kg	EPA 8081A	

Sample ID: B93- 1.5 **Laboratory ID:** T183212-42

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**7.8**	0.25	mg/kg	6020 ICP-MS	
Lead	**9.6**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**5.8**	5.0	ug/kg	EPA 8081A	

Sample ID: B93- 2.5 **Laboratory ID:** T183212-43

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B46- 0.5 **Laboratory ID:** T183212-44

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**91**	1.0	mg/kg	EPA 6010b	
Chromium	**18**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.9**	2.0	mg/kg	EPA 6010b	
Copper	**21**	1.0	mg/kg	EPA 6010b	
Lead	**21**	3.0	mg/kg	EPA 6010b	
Nickel	**14**	2.0	mg/kg	EPA 6010b	
Vanadium	**43**	5.0	mg/kg	EPA 6010b	
Zinc	**210**	1.0	mg/kg	EPA 6010b	

Sample ID: B46- 0.5 dup **Laboratory ID:** T183212-45

Analyte	Result	Reporting Limit	Units	Method	Notes
C29-C40 (MORO)	**64**	10	mg/kg	EPA 8015B	
Arsenic	**10**	4.5	mg/kg	EPA 6010b	
Barium	**150**	0.91	mg/kg	EPA 6010b	
Chromium	**25**	1.8	mg/kg	EPA 6010b	
Cobalt	**12**	1.8	mg/kg	EPA 6010b	
Copper	**31**	0.91	mg/kg	EPA 6010b	
Nickel	**19**	1.8	mg/kg	EPA 6010b	
Vanadium	**63**	4.5	mg/kg	EPA 6010b	
Zinc	**180**	0.91	mg/kg	EPA 6010b	

Sample ID: B46- 1.5 **Laboratory ID:** T183212-46

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**190**	1.0	mg/kg	EPA 6010b	
Chromium	**40**	2.0	mg/kg	EPA 6010b	
Cobalt	**16**	2.0	mg/kg	EPA 6010b	
Copper	**67**	1.0	mg/kg	EPA 6010b	
Nickel	**19**	2.0	mg/kg	EPA 6010b	
Vanadium	**98**	5.0	mg/kg	EPA 6010b	
Zinc	**95**	1.0	mg/kg	EPA 6010b	

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Sample ID: B46- 1.5 dup **Laboratory ID:** T183212-47

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**28**	2.0	mg/kg	EPA 6010b	
Cobalt	**13**	2.0	mg/kg	EPA 6010b	
Copper	**29**	1.0	mg/kg	EPA 6010b	
Nickel	**18**	2.0	mg/kg	EPA 6010b	
Vanadium	**70**	5.0	mg/kg	EPA 6010b	
Zinc	**62**	1.0	mg/kg	EPA 6010b	

Sample ID: B46- 2.5 **Laboratory ID:** T183212-48

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**35**	2.0	mg/kg	EPA 6010b	
Cobalt	**16**	2.0	mg/kg	EPA 6010b	
Copper	**37**	1.0	mg/kg	EPA 6010b	
Lead	**30**	3.0	mg/kg	EPA 6010b	
Nickel	**21**	2.0	mg/kg	EPA 6010b	
Vanadium	**93**	5.0	mg/kg	EPA 6010b	
Zinc	**79**	1.0	mg/kg	EPA 6010b	

Sample ID: B46- 2.5 dup **Laboratory ID:** T183212-49

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**180**	1.0	mg/kg	EPA 6010b	
Chromium	**35**	2.0	mg/kg	EPA 6010b	
Cobalt	**14**	2.0	mg/kg	EPA 6010b	
Copper	**37**	1.0	mg/kg	EPA 6010b	
Nickel	**27**	2.0	mg/kg	EPA 6010b	
Vanadium	**90**	5.0	mg/kg	EPA 6010b	
Zinc	**80**	1.0	mg/kg	EPA 6010b	

Sample ID: EB-04 **Laboratory ID:** T183212-50

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Sample ID: EB-04 **Laboratory ID:** T183212-50

No Results Detected

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B28-2.5

T183212-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*69.4 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B29-0.5

T183212-02 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**11**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B29-1.5

T183212-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**12**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**5.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*79.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B29-2.5

T183212-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*82.3 %*	*35-140*		"	"	"	"	

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B31-0.5-dup

T183212-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**41**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102423	10/24/18	10/26/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*69.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.6 %*	*35-140*		"	"	"	"	

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B31- 1.5-dup

T183212-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**8.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*80.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*80.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B31- 2.5-dup

T183212-07 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**5.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B31- 0.5

T183212-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**31**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102423	10/24/18	10/26/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*63.2 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*64.8 %*		*35-140*	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B31- 1.5

T183212-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.2 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B31- 2.5

T183212-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B14- 0.5

T183212-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**9.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*83.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*84.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B14- 1.5

T183212-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*80.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*81.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B14- 2.5

T183212-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**6.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*77.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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B25- 0.5

T183212-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**8.0**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**130**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102423	10/24/18	10/26/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*61.9 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*69.5 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B25-1.5

T183212-15 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**6.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*75.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B25- 2.5

T183212-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**6.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B12- 0.5

T183212-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**5.3**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**270**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8102423	10/24/18	10/26/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*64.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*75.3 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B12- 1.5

T183212-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*76.0 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B12- 2.5

T183212-19 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102603	10/26/18	10/26/18	6020 ICP-MS	
Lead	**6.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B52-0.5

T183212-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**13**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102423	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*80.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*90.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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B52- 1.5

T183212-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**12**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**17**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B52- 2.5

T183212-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**12**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**5.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*79.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B30- 0.5

T183212-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**13**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*77.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*71.4 %*	*35-140*		"	"	"	"	

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B30- 1.5

T183212-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*85.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*81.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B30- 2.5

T183212-25 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*69.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B19-0.5-dup

T183212-26 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**16**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	**8.9**	5.0	"	"	"	"	"	"	
alpha-Chlordane	**8.7**	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75.0 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*70.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B19- 1.5-dup

T183212-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**9.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*65.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B19- 2.5 dup

T183212-28 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B11- 0.5

T183212-29 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**21**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**9.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**40**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*109 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*95.5 %*	*35-140*		"	"	"	"	

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B11- 1.5

T183212-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**37**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**34**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102424	10/24/18	10/29/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	**140**	25	"	"	"	"	"	"	
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*61.4 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*73.4 %*		*35-140*	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B11- 2.5

T183212-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**44**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**40**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102424	10/24/18	10/29/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	**160**	25	"	"	"	"	"	"	
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*73.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*71.0 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B69- 0.5

T183212-32 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**13**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**13**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*61.0 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*57.2 %*	*35-140*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B69- 1.5

T183212-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**9.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*56.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*53.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B69- 2.5

T183212-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**8.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*62.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B19- 0.5

T183212-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**22**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**18**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	**6.1**	5.0	"	"	"	"	"	"	
alpha-Chlordane	**6.9**	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*66.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B19- 1.5

T183212-36 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**8.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B19- 2.5

T183212-37 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**7.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*83.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*81.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B90- 0.5

T183212-38 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102606	10/26/18	10/26/18	6020 ICP-MS	
Lead	**53**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8102424	10/24/18	10/29/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	**290**	50	"	"	"	"	"	"	
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*90.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*77.8 %*	*35-140*		"	"	"	"	

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B90- 1.5

T183212-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8102614	10/26/18	10/26/18	6020 ICP-MS	
Lead	**28**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**52**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*60.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*56.7 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B90- 2.5

T183212-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8102614	10/26/18	10/26/18	6020 ICP-MS	
Lead	**38**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102424	10/24/18	10/30/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**80**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	**7.0**	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*61.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*58.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B93- 0.5

T183212-41 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8102614	10/26/18	10/26/18	6020 ICP-MS	
Lead	**37**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8102426	10/24/18	10/29/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	**120**	25	"	"	"	"	"	"	
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*60.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*57.8 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B93- 1.5

T183212-42 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**7.8**	0.25	mg/kg	1	8102614	10/26/18	10/26/18	6020 ICP-MS	
Lead	**9.6**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102426	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**5.8**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*73.8 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*73.4 %*	*35-140*		"	"	"	"	

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B93- 2.5

T183212-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**11**	0.25	mg/kg	1	8102614	10/26/18	10/26/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8102426	10/24/18	10/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*86.9 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 0.5

T183212-44 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	600	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*92.3 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/24/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*98.2 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**91**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**18**	2.0	"	"	"	"	"	"	
Cobalt	**7.9**	2.0	"	"	"	"	"	"	
Copper	**21**	1.0	"	"	"	"	"	"	
Lead	**21**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**14**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**43**	5.0	"	"	"	"	"	"	
Zinc	**210**	1.0	"	"	"	"	"	"	

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Kris Kubota, Project Manager Assistant

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

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T183212-44 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102428	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*94.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*105 %*	*35-140*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	7.2	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	7.2	"	"	"	"	"	"	
Bromodichloromethane	ND	7.2	"	"	"	"	"	"	
Bromoform	ND	7.2	"	"	"	"	"	"	
Bromomethane	ND	7.2	"	"	"	"	"	"	
n-Butylbenzene	ND	7.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	7.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	7.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	7.2	"	"	"	"	"	"	
Chlorobenzene	ND	7.2	"	"	"	"	"	"	
Chloroethane	ND	7.2	"	"	"	"	"	"	
Chloroform	ND	7.2	"	"	"	"	"	"	
Chloromethane	ND	7.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	7.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	7.2	"	"	"	"	"	"	
Dibromochloromethane	ND	7.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	14	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 0.5

T183212-44 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dibromoethane (EDB)	ND	7.2	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Dibromomethane	ND	7.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	7.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	7.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	7.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	7.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	7.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	7.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	7.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	7.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	7.2	"	"	"	"	"	"	
1,2-Dichloropropane	ND	7.2	"	"	"	"	"	"	
1,3-Dichloropropane	ND	7.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	7.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	7.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	7.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	7.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	7.2	"	"	"	"	"	"	
Isopropylbenzene	ND	7.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	7.2	"	"	"	"	"	"	
Methylene chloride	ND	7.2	"	"	"	"	"	"	
Naphthalene	ND	7.2	"	"	"	"	"	"	
n-Propylbenzene	ND	7.2	"	"	"	"	"	"	
Styrene	ND	7.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.2	"	"	"	"	"	"	
Tetrachloroethene	ND	7.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	7.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	7.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	7.2	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

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T183212-44 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trichloroethene	ND	7.2	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	7.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	7.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	7.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	7.2	"	"	"	"	"	"	
Vinyl chloride	ND	7.2	"	"	"	"	"	"	
Benzene	ND	7.2	"	"	"	"	"	"	
Toluene	ND	7.2	"	"	"	"	"	"	
Ethylbenzene	ND	7.2	"	"	"	"	"	"	
m,p-Xylene	ND	14	"	"	"	"	"	"	
o-Xylene	ND	7.2	"	"	"	"	"	"	
Surrogate: Toluene-d8		*97.6 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.9 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*	*77.8-142*		"	"	"	"	

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B46- 0.5 dup

T183212-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	440	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/24/18	EPA 8015B	
C29-C40 (MORO)	**64**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*92.9 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	2.7	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	1.8	"	"	"	"	"	"	
Arsenic	**10**	4.5	"	"	"	"	"	"	
Barium	**150**	0.91	"	"	"	"	"	"	
Beryllium	ND	0.91	"	"	"	"	"	"	
Cadmium	ND	1.8	"	"	"	"	"	"	
Chromium	**25**	1.8	"	"	"	"	"	"	
Cobalt	**12**	1.8	"	"	"	"	"	"	
Copper	**31**	0.91	"	"	"	"	"	"	
Lead	ND	2.7	"	"	"	"	"	"	
Molybdenum	ND	4.5	"	"	"	"	"	"	
Nickel	**19**	1.8	"	"	"	"	"	"	
Selenium	ND	4.5	"	"	"	"	"	"	
Thallium	ND	1.8	"	"	"	"	"	"	
Vanadium	**63**	4.5	"	"	"	"	"	"	
Zinc	**180**	0.91	"	"	"	"	"	"	

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T183212-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102428	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*100 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*111 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	6.1	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	6.1	"	"	"	"	"	"	
Bromodichloromethane	ND	6.1	"	"	"	"	"	"	
Bromoform	ND	6.1	"	"	"	"	"	"	
Bromomethane	ND	6.1	"	"	"	"	"	"	
n-Butylbenzene	ND	6.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.1	"	"	"	"	"	"	
Chlorobenzene	ND	6.1	"	"	"	"	"	"	
Chloroethane	ND	6.1	"	"	"	"	"	"	
Chloroform	ND	6.1	"	"	"	"	"	"	
Chloromethane	ND	6.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
Dibromochloromethane	ND	6.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 0.5 dup

T183212-45 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	6.1	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Dibromomethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	6.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.1	"	"	"	"	"	"	
Isopropylbenzene	ND	6.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.1	"	"	"	"	"	"	
Methylene chloride	ND	6.1	"	"	"	"	"	"	
Naphthalene	ND	6.1	"	"	"	"	"	"	
n-Propylbenzene	ND	6.1	"	"	"	"	"	"	
Styrene	ND	6.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
Tetrachloroethene	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.1	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

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T183212-45 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trichloroethene	ND	6.1	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
Vinyl chloride	ND	6.1	"	"	"	"	"	"	
Benzene	ND	6.1	"	"	"	"	"	"	
Toluene	ND	6.1	"	"	"	"	"	"	
Ethylbenzene	ND	6.1	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	6.1	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.1 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*	*77.8-142*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 1.5

T183212-46 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	510	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*98.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/25/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*117 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**190**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**40**	2.0	"	"	"	"	"	"	
Cobalt	**16**	2.0	"	"	"	"	"	"	
Copper	**67**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**19**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**98**	5.0	"	"	"	"	"	"	
Zinc	**95**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 1.5

T183212-46 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102428	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*90.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*100 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	8.8	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	8.8	"	"	"	"	"	"	
Bromodichloromethane	ND	8.8	"	"	"	"	"	"	
Bromoform	ND	8.8	"	"	"	"	"	"	
Bromomethane	ND	8.8	"	"	"	"	"	"	
n-Butylbenzene	ND	8.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	8.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	8.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	8.8	"	"	"	"	"	"	
Chlorobenzene	ND	8.8	"	"	"	"	"	"	
Chloroethane	ND	8.8	"	"	"	"	"	"	
Chloroform	ND	8.8	"	"	"	"	"	"	
Chloromethane	ND	8.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	8.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	8.8	"	"	"	"	"	"	
Dibromochloromethane	ND	8.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	18	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 1.5

T183212-46 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	8.8	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Dibromomethane	ND	8.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	8.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	8.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	8.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	8.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	8.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	8.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	8.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	8.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.8	"	"	"	"	"	"	
1,2-Dichloropropane	ND	8.8	"	"	"	"	"	"	
1,3-Dichloropropane	ND	8.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	8.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	8.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	8.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	8.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	8.8	"	"	"	"	"	"	
Isopropylbenzene	ND	8.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	8.8	"	"	"	"	"	"	
Methylene chloride	ND	8.8	"	"	"	"	"	"	
Naphthalene	ND	8.8	"	"	"	"	"	"	
n-Propylbenzene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	8.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	8.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	8.8	"	"	"	"	"	"	
Tetrachloroethene	ND	8.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	8.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	8.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	8.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	8.8	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 1.5

T183212-46 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Trichloroethene	ND	8.8	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	8.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	8.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	8.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	8.8	"	"	"	"	"	"	
Vinyl chloride	ND	8.8	"	"	"	"	"	"	
Benzene	ND	8.8	"	"	"	"	"	"	
Toluene	ND	8.8	"	"	"	"	"	"	
Ethylbenzene	ND	8.8	"	"	"	"	"	"	
m,p-Xylene	ND	18	"	"	"	"	"	"	
o-Xylene	ND	8.8	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.4 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*	*77.8-142*		"	"	"	"	

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B46- 1.5 dup

T183212-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	690	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*81.1 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/25/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*116 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	10/23/18	"	
Cadmium	ND	2.0	"	"	"	"	10/23/18	"	
Chromium	**28**	2.0	"	"	"	"	"	"	
Cobalt	**13**	2.0	"	"	"	"	"	"	
Copper	**29**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**18**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**70**	5.0	"	"	"	"	"	"	
Zinc	**62**	1.0	"	"	"	"	"	"	

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B46- 1.5 dup

T183212-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102428	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*91.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*101 %*	*35-140*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	8.4	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	8.4	"	"	"	"	"	"	
Bromodichloromethane	ND	8.4	"	"	"	"	"	"	
Bromoform	ND	8.4	"	"	"	"	"	"	
Bromomethane	ND	8.4	"	"	"	"	"	"	
n-Butylbenzene	ND	8.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	8.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	8.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	8.4	"	"	"	"	"	"	
Chlorobenzene	ND	8.4	"	"	"	"	"	"	
Chloroethane	ND	8.4	"	"	"	"	"	"	
Chloroform	ND	8.4	"	"	"	"	"	"	
Chloromethane	ND	8.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	8.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	8.4	"	"	"	"	"	"	
Dibromochloromethane	ND	8.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	17	"	"	"	"	"	"	

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B46- 1.5 dup

T183212-47 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	8.4	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Dibromomethane	ND	8.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	8.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	8.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	8.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	8.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	8.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	8.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	8.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	8.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.4	"	"	"	"	"	"	
1,2-Dichloropropane	ND	8.4	"	"	"	"	"	"	
1,3-Dichloropropane	ND	8.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	8.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	8.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	8.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	8.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	8.4	"	"	"	"	"	"	
Isopropylbenzene	ND	8.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	8.4	"	"	"	"	"	"	
Methylene chloride	ND	8.4	"	"	"	"	"	"	
Naphthalene	ND	8.4	"	"	"	"	"	"	
n-Propylbenzene	ND	8.4	"	"	"	"	"	"	
Styrene	ND	8.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	8.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	8.4	"	"	"	"	"	"	
Tetrachloroethene	ND	8.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	8.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	8.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	8.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	8.4	"	"	"	"	"	"	

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B46- 1.5 dup

T183212-47 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trichloroethene	ND	8.4	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	8.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	8.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	8.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	8.4	"	"	"	"	"	"	
Vinyl chloride	ND	8.4	"	"	"	"	"	"	
Benzene	ND	8.4	"	"	"	"	"	"	
Toluene	ND	8.4	"	"	"	"	"	"	
Ethylbenzene	ND	8.4	"	"	"	"	"	"	
m,p-Xylene	ND	17	"	"	"	"	"	"	
o-Xylene	ND	8.4	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*	*77.8-142*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 2.5

T183212-48 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	510	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*86.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/25/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*119 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**35**	2.0	"	"	"	"	"	"	
Cobalt	**16**	2.0	"	"	"	"	"	"	
Copper	**37**	1.0	"	"	"	"	"	"	
Lead	**30**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**21**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**93**	5.0	"	"	"	"	"	"	
Zinc	**79**	1.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 2.5

T183212-48 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102428	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*95.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*103 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.3	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	5.3	"	"	"	"	"	"	
Bromodichloromethane	ND	5.3	"	"	"	"	"	"	
Bromoform	ND	5.3	"	"	"	"	"	"	
Bromomethane	ND	5.3	"	"	"	"	"	"	
n-Butylbenzene	ND	5.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.3	"	"	"	"	"	"	
Chlorobenzene	ND	5.3	"	"	"	"	"	"	
Chloroethane	ND	5.3	"	"	"	"	"	"	
Chloroform	ND	5.3	"	"	"	"	"	"	
Chloromethane	ND	5.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.3	"	"	"	"	"	"	
Dibromochloromethane	ND	5.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 2.5

T183212-48 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	5.3	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Dibromomethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.3	"	"	"	"	"	"	
Isopropylbenzene	ND	5.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.3	"	"	"	"	"	"	
Methylene chloride	ND	5.3	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
n-Propylbenzene	ND	5.3	"	"	"	"	"	"	
Styrene	ND	5.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.3	"	"	"	"	"	"	
Tetrachloroethene	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.3	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

B46- 2.5

T183212-48 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trichloroethene	ND	5.3	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	5.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.3	"	"	"	"	"	"	
Vinyl chloride	ND	5.3	"	"	"	"	"	"	
Benzene	ND	5.3	"	"	"	"	"	"	
Toluene	ND	5.3	"	"	"	"	"	"	
Ethylbenzene	ND	5.3	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.3	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.7 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.0 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*	*77.8-142*		"	"	"	"	

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B46- 2.5 dup

T183212-49 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	540	ug/kg	1	8102316	10/23/18	10/25/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*107 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8102414	10/24/18	10/25/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*118 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8102318	10/23/18	10/23/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**180**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**35**	2.0	"	"	"	"	"	"	
Cobalt	**14**	2.0	"	"	"	"	"	"	
Copper	**37**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**27**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**90**	5.0	"	"	"	"	"	"	
Zinc	**80**	1.0	"	"	"	"	"	"	

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B46- 2.5 dup

T183212-49 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8102319	10/23/18	10/23/18	EPA 7471A Soil	
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8102428	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*94.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*110 %*	*35-140*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	6.4	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Bromochloromethane	ND	6.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.4	"	"	"	"	"	"	
Bromoform	ND	6.4	"	"	"	"	"	"	
Bromomethane	ND	6.4	"	"	"	"	"	"	
n-Butylbenzene	ND	6.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	6.4	"	"	"	"	"	"	
Chloroethane	ND	6.4	"	"	"	"	"	"	
Chloroform	ND	6.4	"	"	"	"	"	"	
Chloromethane	ND	6.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.4	"	"	"	"	"	"	
Dibromochloromethane	ND	6.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	13	"	"	"	"	"	"	

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B46- 2.5 dup

T183212-49 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dibromoethane (EDB)	ND	6.4	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Dibromomethane	ND	6.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.4	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.4	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	6.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	6.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.4	"	"	"	"	"	"	
Isopropylbenzene	ND	6.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.4	"	"	"	"	"	"	
Methylene chloride	ND	6.4	"	"	"	"	"	"	
Naphthalene	ND	6.4	"	"	"	"	"	"	
n-Propylbenzene	ND	6.4	"	"	"	"	"	"	
Styrene	ND	6.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.4	"	"	"	"	"	"	
Tetrachloroethene	ND	6.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.4	"	"	"	"	"	"	

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B46- 2.5 dup

T183212-49 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trichloroethene	ND	6.4	ug/kg	1	8102231	10/22/18	10/23/18	EPA 8260B/5035	
Trichlorofluoromethane	ND	6.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.4	"	"	"	"	"	"	
Vinyl chloride	ND	6.4	"	"	"	"	"	"	
Benzene	ND	6.4	"	"	"	"	"	"	
Toluene	ND	6.4	"	"	"	"	"	"	
Ethylbenzene	ND	6.4	"	"	"	"	"	"	
m,p-Xylene	ND	13	"	"	"	"	"	"	
o-Xylene	ND	6.4	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.6 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*	*77.8-142*		"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

EB-04

T183212-50 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	50	ug/l	1	8102335	10/23/18	10/24/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*107 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8102425	10/24/18	10/25/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*104 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8102415	10/24/18	10/26/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	"	"	
Cadmium	ND	50	"	"	"	"	"	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

EB-04

T183212-50 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	1.0	ug/l	1	8102416	10/24/18	10/25/18	6020 ICP-MS	
Lead	ND	2.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8102417	10/24/18	10/29/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8102433	10/24/18	10/26/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.0 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*69.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

EB-04

T183212-50 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	2.00	ug/l	1	8102435	10/24/18	10/27/18	EPA 8082	
PCB-1221	ND	2.00	"	"	"	"	"	"	
PCB-1232	ND	2.00	"	"	"	"	"	"	
PCB-1242	ND	2.00	"	"	"	"	"	"	
PCB-1248	ND	2.00	"	"	"	"	"	"	
PCB-1254	ND	2.00	"	"	"	"	"	"	
PCB-1260	ND	2.00	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*104 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8102219	10/23/18	10/24/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

EB-04

T183212-50 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,4-Dichlorobenzene	ND	1.0	ug/l	1	8102219	10/23/18	10/24/18	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

EB-04

T183212-50 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Vinyl chloride	ND	1.0	ug/l	1	8102219	10/23/18	10/24/18	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*96.0 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*92.6-108*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102316 - EPA 5035 GC										
Blank (8102316-BLK1)				Prepared: 10/23/18 Analyzed: 10/25/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*111*		*"*	*100*		*111*	*65-135*			
LCS (8102316-BS1)				Prepared: 10/23/18 Analyzed: 10/25/18						
C4-C12 (GRO)	10900		ug/kg	11000		98.8	75-125			
Surrogate: 4-Bromofluorobenzene	*128*		*"*	*100*		*128*	*65-135*			
LCS Dup (8102316-BSD1)				Prepared: 10/23/18 Analyzed: 10/25/18						
C4-C12 (GRO)	11000		ug/kg	11000		100	75-125	1.21	20	
Surrogate: 4-Bromofluorobenzene	*129*		*"*	*100*		*129*	*65-135*			
Batch 8102335 - EPA 5030 GC										
Blank (8102335-BLK1)				Prepared: 10/23/18 Analyzed: 10/24/18						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*86.4*		*"*	*100*		*86.4*	*65-135*			
LCS (8102335-BS1)				Prepared: 10/23/18 Analyzed: 10/24/18						
C4-C12 (GRO)	4940		ug/l	5500		89.9	75-125			
Surrogate: 4-Bromofluorobenzene	*118*		*"*	*100*		*118*	*65-135*			
LCS Dup (8102335-BSD1)				Prepared: 10/23/18 Analyzed: 10/24/18						
C4-C12 (GRO)	5250		ug/l	5500		95.4	75-125	5.96	20	
Surrogate: 4-Bromofluorobenzene	*114*		*"*	*100*		*114*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102414 - EPA 3550B GC										
Blank (8102414-BLK1)				Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*119*		*"*	*99.0*		*120*	*65-135*			
LCS (8102414-BS1)				Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	500	10	mg/kg	495		101	75-125			
Surrogate: p-Terphenyl	*107*		*"*	*99.0*		*109*	*65-135*			
Matrix Spike (8102414-MS1)		**Source: T183211-33**		Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	520	10	mg/kg	490	ND	107	75-125			
Surrogate: p-Terphenyl	*116*		*"*	*98.0*		*118*	*65-135*			
Matrix Spike Dup (8102414-MSD1)		**Source: T183211-33**		Prepared & Analyzed: 10/24/18						
C13-C28 (DRO)	500	10	mg/kg	490	ND	102	75-125	4.05	20	
Surrogate: p-Terphenyl	*112*		*"*	*98.0*		*114*	*65-135*			
Batch 8102425 - EPA 3510C GC										
Blank (8102425-BLK1)				Prepared: 10/24/18 Analyzed: 10/25/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*5.05*		*"*	*4.00*		*126*	*65-135*			
LCS (8102425-BS1)				Prepared: 10/24/18 Analyzed: 10/25/18						
C13-C28 (DRO)	21.1	0.50	mg/l	20.0		106	75-125			
Surrogate: p-Terphenyl	*4.95*		*"*	*4.00*		*124*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102425 - EPA 3510C GC										
LCS Dup (8102425-BSD1)				Prepared: 10/24/18 Analyzed: 10/25/18						
C13-C28 (DRO)	20.7	0.50	mg/l	20.0		104	75-125	1.85	20	
Surrogate: p-Terphenyl	*4.75*		*"*	*4.00*		*119*	*65-135*			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102318 - EPA 3050B										
Blank (8102318-BLK1)				Prepared & Analyzed: 10/23/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8102318-BS1)				Prepared & Analyzed: 10/23/18						
Arsenic	105	5.0	mg/kg	100		105	75-125			
Barium	109	1.0	"	100		109	75-125			
Cadmium	107	2.0	"	100		107	75-125			
Chromium	109	2.0	"	100		109	75-125			
Lead	108	3.0	"	100		108	75-125			
Matrix Spike (8102318-MS1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Arsenic	87.3	5.0	mg/kg	100	ND	87.3	75-125			
Barium	386	1.0	"	100	217	169	75-125			QR-04
Cadmium	109	2.0	"	100	ND	109	75-125			
Chromium	112	2.0	"	100	2.58	109	75-125			
Lead	120	3.0	"	100	ND	120	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102318 - EPA 3050B										
Matrix Spike Dup (8102318-MSD1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Arsenic	84.3	5.0	mg/kg	100	ND	84.3	75-125	3.49	20	
Barium	338	1.0	"	100	217	121	75-125	13.5	20	
Cadmium	96.6	2.0	"	100	ND	96.6	75-125	12.4	20	
Chromium	97.3	2.0	"	100	2.58	94.7	75-125	13.7	20	
Lead	112	3.0	"	100	ND	112	75-125	7.28	20	
Batch 8102415 - EPA 3010A										
Blank (8102415-BLK1)				Prepared: 10/24/18 Analyzed: 10/26/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8102415-BS1)				Prepared: 10/24/18 Analyzed: 10/26/18						
Arsenic	467	50	ug/l	500		93.4	75-125			
Barium	482	50	"	500		96.4	75-125			
Cadmium	482	50	"	500		96.3	75-125			
Chromium	484	50	"	500		96.7	75-125			
Lead	447	50	"	500		89.4	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102415 - EPA 3010A										
Matrix Spike (8102415-MS1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/26/18						
Arsenic	474	50	ug/l	500	ND	94.8	75-125			
Barium	484	50	"	500	ND	96.9	75-125			
Cadmium	484	50	"	500	ND	96.8	75-125			
Chromium	487	50	"	500	ND	97.4	75-125			
Lead	480	50	"	500	ND	95.9	75-125			
Matrix Spike Dup (8102415-MSD1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/26/18						
Arsenic	516	50	ug/l	500	ND	103	75-125	8.45	20	
Barium	482	50	"	500	ND	96.4	75-125	0.527	20	
Cadmium	481	50	"	500	ND	96.2	75-125	0.592	20	
Chromium	484	50	"	500	ND	96.8	75-125	0.666	20	
Lead	501	50	"	500	ND	100	75-125	4.29	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102416 - EPA 3010A										
Blank (8102416-BLK1)				Prepared: 10/24/18 Analyzed: 10/25/18						
Arsenic	ND	1.0	ug/l							
Lead	ND	2.0	"							
LCS (8102416-BS1)				Prepared: 10/24/18 Analyzed: 10/26/18						
Arsenic	54.8	1.0	ug/l	50.0		110	80-120			
Lead	59.4	2.0	"	50.0		119	80-120			
Matrix Spike (8102416-MS1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/25/18						
Arsenic	60.3	1.0	ug/l	50.0	ND	121	75-125			
Lead	62.4	2.0	"	50.0	ND	125	75-125			
Matrix Spike Dup (8102416-MSD1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/25/18						
Arsenic	60.3	1.0	ug/l	50.0	ND	121	75-125	0.0285	20	
Lead	63.6	2.0	"	50.0	ND	127	75-125	1.90	20	QR-04
Batch 8102603 - EPA 3050B										
Blank (8102603-BLK1)				Prepared & Analyzed: 10/26/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8102603-BS1)				Prepared & Analyzed: 10/26/18						
Arsenic	26.2	0.25	mg/kg	25.0		105	80-120			
Lead	26.7	0.25	"	25.0		107	80-120			
Matrix Spike (8102603-MS1)		**Source: T183212-01**		Prepared & Analyzed: 10/26/18						
Arsenic	41.0	0.25	mg/kg	24.3	16.9	99.3	75-125			
Lead	33.5	0.25	"	24.3	7.15	108	75-125			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102603 - EPA 3050B										
Matrix Spike (8102603-MS2)		**Source: T183212-02**		Prepared & Analyzed: 10/26/18						
Arsenic	36.8	0.25	mg/kg	25.0	11.3	102	75-125			
Lead	39.4	0.25	"	25.0	12.5	108	75-125			
Matrix Spike Dup (8102603-MSD1)		**Source: T183212-01**		Prepared & Analyzed: 10/26/18						
Arsenic	38.5	0.25	mg/kg	25.0	16.9	86.3	75-125	6.37	20	
Lead	32.1	0.25	"	25.0	7.15	99.6	75-125	4.33	20	
Batch 8102606 - EPA 3050B										
Blank (8102606-BLK1)				Prepared & Analyzed: 10/26/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8102606-BS1)				Prepared & Analyzed: 10/26/18						
Arsenic	24.0	0.25	mg/kg	25.0		96.1	80-120			
Lead	24.7	0.25	"	25.0		98.6	80-120			
Matrix Spike (8102606-MS1)		**Source: T183212-20**		Prepared & Analyzed: 10/26/18						
Arsenic	41.2	0.25	mg/kg	25.0	19.6	86.2	75-125			
Lead	40.3	0.25	"	25.0	13.1	109	75-125			
Matrix Spike (8102606-MS2)		**Source: T183212-21**		Prepared & Analyzed: 10/26/18						
Arsenic	41.2	0.25	mg/kg	25.0	12.2	116	75-125			
Lead	46.1	0.25	"	25.0	16.9	117	75-125			
Matrix Spike Dup (8102606-MSD1)		**Source: T183212-20**		Prepared & Analyzed: 10/26/18						
Arsenic	44.2	0.25	mg/kg	25.0	19.6	98.3	75-125	7.10	20	
Lead	40.7	0.25	"	25.0	13.1	111	75-125	0.936	20	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102614 - EPA 3050B										
Blank (8102614-BLK1)				Prepared & Analyzed: 10/26/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8102614-BS1)				Prepared & Analyzed: 10/26/18						
Arsenic	28.3	0.25	mg/kg	25.0		113	80-120			
Lead	28.5	0.25	"	25.0		114	80-120			
Matrix Spike (8102614-MS1)		**Source: T183212-39**		Prepared & Analyzed: 10/26/18						
Arsenic	43.3	0.25	mg/kg	25.0	14.0	117	75-125			
Lead	50.1	0.25	"	25.0	28.0	88.4	75-125			
Matrix Spike (8102614-MS2)		**Source: T183212-40**		Prepared & Analyzed: 10/26/18						
Arsenic	41.5	0.25	mg/kg	25.0	15.1	106	75-125			
Lead	60.2	0.25	"	25.0	38.3	87.7	75-125			
Matrix Spike Dup (8102614-MSD1)		**Source: T183212-39**		Prepared & Analyzed: 10/26/18						
Arsenic	41.7	0.25	mg/kg	25.0	14.0	111	75-125	3.81	20	
Lead	47.1	0.25	"	25.0	28.0	76.5	75-125	6.15	20	

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Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102319 - EPA 7471A Soil										
Blank (8102319-BLK1)				Prepared & Analyzed: 10/23/18						
Mercury	ND	0.10	mg/kg							
LCS (8102319-BS1)				Prepared & Analyzed: 10/23/18						
Mercury	0.336	0.10	mg/kg	0.417		80.5	80-120			
Matrix Spike (8102319-MS1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Mercury	0.316	0.10	mg/kg	0.417	ND	75.7	75-125			
Matrix Spike Dup (8102319-MSD1)		**Source: T183192-04**		Prepared & Analyzed: 10/23/18						
Mercury	0.323	0.10	mg/kg	0.417	ND	77.5	75-125	2.31	20	
Batch 8102417 - EPA 7470A Water										
Blank (8102417-BLK1)				Prepared: 10/24/18 Analyzed: 10/29/18						
Mercury	ND	0.50	ug/l							
LCS (8102417-BS1)				Prepared: 10/24/18 Analyzed: 10/29/18						
Mercury	1.45	0.50	ug/l				80-120			
Matrix Spike (8102417-MS1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/29/18						
Mercury	1.41	0.50	ug/l		ND		75-125			
Matrix Spike Dup (8102417-MSD1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/29/18						
Mercury	1.42	0.50	ug/l		ND		75-125	0.252	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102423 - EPA 3550 ECD/GCMS										
Blank (8102423-BLK1)				Prepared: 10/24/18 Analyzed: 10/26/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.01*		*"*	*9.90*		*70.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.84*		*"*	*9.90*		*69.1*	*35-140*			
LCS (8102423-BS1)				Prepared: 10/24/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	28.8	5.0	ug/kg	39.6		72.6	40-120			
Heptachlor	30.9	5.0	"	39.6		78.1	40-120			
Aldrin	29.6	5.0	"	39.6		74.9	40-120			
Dieldrin	29.9	5.0	"	39.6		75.4	40-120			
Endrin	30.9	5.0	"	39.6		77.9	40-120			
4,4´-DDT	34.4	5.0	"	39.6		86.9	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.31*		*"*	*9.90*		*73.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.36*		*"*	*9.90*		*74.4*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102423 - EPA 3550 ECD/GCMS										
Matrix Spike (8102423-MS1)		**Source: T183212-01**		Prepared: 10/24/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	29.0	5.0	ug/kg	40.0	ND	72.5	30-120			
Heptachlor	27.9	5.0	"	40.0	ND	69.8	30-120			
Aldrin	29.5	5.0	"	40.0	ND	73.7	30-120			
Dieldrin	29.4	5.0	"	40.0	ND	73.4	30-120			
Endrin	26.6	5.0	"	40.0	ND	66.4	30-120			
4,4´-DDT	20.1	5.0	"	40.0	ND	50.2	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.16*		*"*	*10.0*		*71.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.34*		*"*	*10.0*		*73.4*	*35-140*			
Matrix Spike Dup (8102423-MSD1)		**Source: T183212-01**		Prepared: 10/24/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	30.6	5.0	ug/kg	39.6	ND	77.1	30-120	6.24	30	
Heptachlor	29.3	5.0	"	39.6	ND	74.0	30-120	5.90	30	
Aldrin	31.0	5.0	"	39.6	ND	78.3	30-120	6.01	30	
Dieldrin	30.9	5.0	"	39.6	ND	78.0	30-120	6.02	30	
Endrin	28.2	5.0	"	39.6	ND	71.2	30-120	6.96	30	
4,4´-DDT	20.3	5.0	"	39.6	ND	51.4	30-120	2.27	30	
Surrogate: Tetrachloro-meta-xylene	*7.48*		*"*	*9.90*		*75.5*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.55*		*"*	*9.90*		*76.2*	*35-140*			
Batch 8102424 - EPA 3550 ECD/GCMS										
Blank (8102424-BLK1)				Prepared: 10/24/18 Analyzed: 10/29/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							

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Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102424 - EPA 3550 ECD/GCMS										
Blank (8102424-BLK1)				Prepared: 10/24/18 Analyzed: 10/29/18						
Endosulfan II	ND	5.0	ug/kg							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*5.73*		*"*	*10.0*		*57.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.03*		*"*	*10.0*		*60.3*	*35-140*			
LCS (8102424-BS1)				Prepared: 10/24/18 Analyzed: 10/29/18						
gamma-BHC (Lindane)	22.2	5.0	ug/kg	40.0		55.6	40-120			
Heptachlor	21.7	5.0	"	40.0		54.3	40-120			
Aldrin	20.9	5.0	"	40.0		52.4	40-120			
Dieldrin	23.7	5.0	"	40.0		59.2	40-120			
Endrin	23.3	5.0	"	40.0		58.3	40-120			
4,4´-DDT	22.6	5.0	"	40.0		56.6	33-147			
Surrogate: Tetrachloro-meta-xylene	*5.85*		*"*	*10.0*		*58.5*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.19*		*"*	*10.0*		*61.9*	*35-140*			
Matrix Spike (8102424-MS1)		**Source: T183212-21**		Prepared: 10/24/18 Analyzed: 10/29/18						
gamma-BHC (Lindane)	19.6	5.0	ug/kg	40.0	ND	49.0	30-120			
Heptachlor	19.1	5.0	"	40.0	ND	47.7	30-120			
Aldrin	18.3	5.0	"	40.0	ND	45.7	30-120			
Dieldrin	21.3	5.0	"	40.0	ND	53.2	30-120			
Endrin	21.5	5.0	"	40.0	ND	53.7	30-120			
4,4´-DDT	21.3	5.0	"	40.0	ND	53.2	30-120			
Surrogate: Tetrachloro-meta-xylene	*4.69*		*"*	*10.0*		*46.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*5.58*		*"*	*10.0*		*55.8*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102424 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (8102424-MSD1)		**Source: T183212-21**		Prepared: 10/24/18 Analyzed: 10/29/18						
gamma-BHC (Lindane)	25.0	5.0	ug/kg	40.0	ND	62.5	30-120	24.4	30	
Heptachlor	20.9	5.0	"	40.0	ND	52.3	30-120	9.21	30	
Aldrin	22.5	5.0	"	40.0	ND	56.2	30-120	20.5	30	
Dieldrin	22.2	5.0	"	40.0	ND	55.5	30-120	4.31	30	
Endrin	21.9	5.0	"	40.0	ND	54.8	30-120	1.99	30	
4,4´-DDT	22.5	5.0	"	40.0	ND	56.2	30-120	5.39	30	
Surrogate: Tetrachloro-meta-xylene	*6.02*		*"*	*10.0*		*60.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*5.56*		*"*	*10.0*		*55.6*	*35-140*			
Batch 8102426 - EPA 3550 ECD/GCMS										
Blank (8102426-BLK1)				Prepared: 10/24/18 Analyzed: 10/29/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.67*		*"*	*10.2*		*75.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.71*		*"*	*10.2*		*75.6*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102426 - EPA 3550 ECD/GCMS										
LCS (8102426-BS1)				Prepared: 10/24/18 Analyzed: 10/29/18						
gamma-BHC (Lindane)	34.1	5.0	ug/kg	40.8		83.4	40-120			
Heptachlor	37.5	5.0	"	40.8		91.8	40-120			
Aldrin	33.7	5.0	"	40.8		82.6	40-120			
Dieldrin	34.8	5.0	"	40.8		85.2	40-120			
Endrin	36.3	5.0	"	40.8		89.0	40-120			
4,4´-DDT	41.8	5.0	"	40.8		103	33-147			
Surrogate: Tetrachloro-meta-xylene	*8.33*		*"*	*10.2*		*81.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.49*		*"*	*10.2*		*83.2*	*35-140*			
Matrix Spike (8102426-MS1)		**Source: T183212-41**		Prepared: 10/24/18 Analyzed: 10/29/18						
gamma-BHC (Lindane)	27.0	25	ug/kg	40.8	ND	66.1	30-120			
Heptachlor	29.6	25	"	40.8	ND	72.5	30-120			
Aldrin	26.2	25	"	40.8	ND	64.1	30-120			
Dieldrin	29.6	25	"	40.8	ND	72.5	30-120			
Endrin	30.3	25	"	40.8	ND	74.3	30-120			
4,4´-DDT	36.0	25	"	40.8	ND	88.2	30-120			
Surrogate: Tetrachloro-meta-xylene	*8.02*		*"*	*10.2*		*78.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*8.92*		*"*	*10.2*		*87.5*	*35-140*			
Matrix Spike Dup (8102426-MSD1)		**Source: T183212-41**		Prepared: 10/24/18 Analyzed: 10/29/18						
gamma-BHC (Lindane)	27.8	25	ug/kg	39.6	ND	70.1	30-120	5.83	30	
Heptachlor	30.9	25	"	39.6	ND	77.9	30-120	7.24	30	
Aldrin	28.1	25	"	39.6	ND	70.9	30-120	10.1	30	
Dieldrin	30.6	25	"	39.6	ND	77.2	30-120	6.29	30	
Endrin	30.7	25	"	39.6	ND	77.5	30-120	4.30	30	
4,4´-DDT	37.3	25	"	39.6	ND	94.3	30-120	6.66	30	
Surrogate: Tetrachloro-meta-xylene	*7.30*		*"*	*9.90*		*73.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.49*		*"*	*9.90*		*75.7*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102433 - EPA 3510C GCMS/ECD										
Blank (8102433-BLK1)				Prepared: 10/24/18 Analyzed: 10/26/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*63.4*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.700*		*"*	*1.00*		*70.0*	*35-140*			
LCS (8102433-BS1)				Prepared: 10/24/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	2.78	1.00	ug/l	4.00		69.5	40-120			
Heptachlor	3.04	1.00	"	4.00		75.9	40-120			
Aldrin	2.87	1.00	"	4.00		71.7	40-120			
Dieldrin	2.96	1.00	"	4.00		73.9	40-120			
Endrin	3.02	1.00	"	4.00		75.6	40-120			
4,4´-DDT	3.49	2.00	"	4.00		87.4	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.638*		*"*	*1.00*		*63.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.674*		*"*	*1.00*		*67.4*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102433 - EPA 3510C GCMS/ECD										
Matrix Spike (8102433-MS1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	2.94	1.00	ug/l	4.00	ND	73.5	20-120			
Heptachlor	3.16	1.00	"	4.00	ND	78.9	20-120			
Aldrin	2.95	1.00	"	4.00	ND	73.6	20-120			
Dieldrin	3.07	1.00	"	4.00	ND	76.6	20-120			
Endrin	3.16	1.00	"	4.00	ND	79.1	20-120			
4,4´-DDT	3.66	2.00	"	4.00	ND	91.4	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.659*		*"*	*1.00*		*65.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.708*		*"*	*1.00*		*70.8*	*35-140*			
Matrix Spike Dup (8102433-MSD1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/26/18						
gamma-BHC (Lindane)	2.93	1.00	ug/l	4.00	ND	73.3	20-120	0.259	30	
Heptachlor	3.13	1.00	"	4.00	ND	78.2	20-120	0.885	30	
Aldrin	2.99	1.00	"	4.00	ND	74.7	20-120	1.42	30	
Dieldrin	3.03	1.00	"	4.00	ND	75.7	20-120	1.17	30	
Endrin	3.12	1.00	"	4.00	ND	77.9	20-120	1.53	30	
4,4´-DDT	3.60	2.00	"	4.00	ND	89.9	20-120	1.60	30	
Surrogate: Tetrachloro-meta-xylene	*0.640*		*"*	*1.00*		*64.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.679*		*"*	*1.00*		*67.9*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102428 - EPA 3550 ECD/GCMS										
Blank (8102428-BLK1)				Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	ND	10	ug/kg							
PCB-1221	ND	10	"							
PCB-1232	ND	10	"							
PCB-1242	ND	10	"							
PCB-1248	ND	10	"							
PCB-1254	ND	10	"							
PCB-1260	ND	10	"							
Surrogate: Tetrachloro-meta-xylene	*9.79*		*"*	*10.1*		*96.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*11.4*		*"*	*10.1*		*113*	*35-140*			
LCS (8102428-BS1)				Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	104	10	ug/kg	101		103	40-130			
PCB-1260	104	10	"	101		103	40-130			
Surrogate: Tetrachloro-meta-xylene	*10.2*		*"*	*10.1*		*101*	*35-140*			
Surrogate: Decachlorobiphenyl	*12.1*		*"*	*10.1*		*119*	*35-140*			
Matrix Spike (8102428-MS1)		**Source: T183212-44**		Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	104	10	ug/kg	99.0	ND	105	40-130			
PCB-1260	95.8	10	"	99.0	ND	96.7	40-130			
Surrogate: Tetrachloro-meta-xylene	*9.23*		*"*	*9.90*		*93.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*10.6*		*"*	*9.90*		*107*	*35-140*			
Matrix Spike Dup (8102428-MSD1)		**Source: T183212-44**		Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	97.9	10	ug/kg	98.0	ND	99.8	40-130	5.99	30	
PCB-1260	99.7	10	"	98.0	ND	102	40-130	3.99	30	
Surrogate: Tetrachloro-meta-xylene	*8.02*		*"*	*9.80*		*81.8*	*35-140*			
Surrogate: Decachlorobiphenyl	*9.31*		*"*	*9.80*		*94.9*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102435 - EPA 3510C GCMS/ECD										
Blank (8102435-BLK1)				Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	ND	2.00	ug/l							
PCB-1221	ND	2.00	"							
PCB-1232	ND	2.00	"							
PCB-1242	ND	2.00	"							
PCB-1248	ND	2.00	"							
PCB-1254	ND	2.00	"							
PCB-1260	ND	2.00	"							
Surrogate: Tetrachloro-meta-xylene	*0.701*		*"*	*1.00*		*70.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*1.15*		*"*	*1.00*		*115*	*35-140*			
LCS (8102435-BS1)				Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	9.75	2.00	ug/l	10.0		97.5	40-130			
PCB-1260	9.86	2.00	"	10.0		98.6	40-130			
Surrogate: Tetrachloro-meta-xylene	*0.646*		*"*	*1.00*		*64.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*1.03*		*"*	*1.00*		*103*	*35-140*			
Matrix Spike (8102435-MS1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	9.77	2.00	ug/l	10.0	ND	97.7	40-130			
PCB-1260	9.81	2.00	"	10.0	ND	98.1	40-130			
Surrogate: Tetrachloro-meta-xylene	*0.651*		*"*	*1.00*		*65.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*1.05*		*"*	*1.00*		*105*	*35-140*			
Matrix Spike Dup (8102435-MSD1)		**Source: T183212-50**		Prepared: 10/24/18 Analyzed: 10/27/18						
PCB-1016	8.81	2.00	ug/l	10.0	ND	88.1	40-130	10.3	30	
PCB-1260	9.27	2.00	"	10.0	ND	92.7	40-130	5.65	30	
Surrogate: Tetrachloro-meta-xylene	*0.601*		*"*	*1.00*		*60.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.967*		*"*	*1.00*		*96.7*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102219 - EPA 5030 GCMS										
Blank (8102219-BLK1)				Prepared: 10/23/18 Analyzed: 10/24/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102219 - EPA 5030 GCMS										
Blank (8102219-BLK1)				Prepared: 10/23/18 Analyzed: 10/24/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*18.6*		*"*	*20.0*		*92.8*	*84.2-108*			
Surrogate: Dibromofluoromethane	*18.8*		*"*	*20.0*		*93.8*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*99.9*	*92.6-108*			
LCS (8102219-BS1)				Prepared: 10/23/18 Analyzed: 10/25/18						
Chlorobenzene	18.6	1.0	ug/l	20.0		93.2	79.3-117			
1,1-Dichloroethene	17.6	1.0	"	20.0		87.8	68.3-130			
Trichloroethene	18.0	1.0	"	20.0		89.8	82.4-119			
Benzene	18.8	0.50	"	20.0		94.1	79.9-118			
Toluene	18.6	0.50	"	20.0		93.0	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.8*		*"*	*20.0*		*99.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*18.9*		*"*	*20.0*		*94.4*	*71.5-128*			
Surrogate: Toluene-d8	*19.8*		*"*	*20.0*		*99.2*	*92.6-108*			

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Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102219 - EPA 5030 GCMS										
LCS Dup (8102219-BSD1)				Prepared: 10/23/18 Analyzed: 10/24/18						
Chlorobenzene	18.8	1.0	ug/l	20.0		93.9	79.3-117	0.802	20	
1,1-Dichloroethene	18.5	1.0	"	20.0		92.4	68.3-130	5.05	20	
Trichloroethene	18.6	1.0	"	20.0		92.8	82.4-119	3.23	20	
Benzene	19.5	0.50	"	20.0		97.7	79.9-118	3.75	20	
Toluene	19.5	0.50	"	20.0		97.3	78.7-116	4.57	20	
Surrogate: 4-Bromofluorobenzene	*19.8*		*"*	*20.0*		*99.2*	*84.2-108*			
Surrogate: Dibromofluoromethane	*18.7*		*"*	*20.0*		*93.3*	*71.5-128*			
Surrogate: Toluene-d8	*20.2*		*"*	*20.0*		*101*	*92.6-108*			
Batch 8102231 - EPA 5035 GCMS										
Blank (8102231-BLK1)				Prepared & Analyzed: 10/22/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102231 - EPA 5035 GCMS										
Blank (8102231-BLK1)				Prepared & Analyzed: 10/22/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8102231 - EPA 5035 GCMS										
Blank (8102231-BLK1)				Prepared & Analyzed: 10/22/18						
Surrogate: Toluene-d8	*42.5*		*ug/kg*	*39.9*		*106*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*39.9*		*"*	*39.9*		*100*	*85.9-114*			
Surrogate: Dibromofluoromethane	*45.3*		*"*	*39.9*		*114*	*77.8-142*			
LCS (8102231-BS1)				Prepared & Analyzed: 10/22/18						
Chlorobenzene	80.5	5.0	ug/kg	99.8		80.7	75-125			
1,1-Dichloroethene	79.3	5.0	"	99.8		79.5	75-125			
Trichloroethene	75.2	5.0	"	99.8		75.4	75-125			
Benzene	84.2	5.0	"	99.8		84.3	75-125			
Toluene	82.6	5.0	"	99.8		82.8	75-125			
Surrogate: Toluene-d8	*39.1*		*"*	*39.9*		*98.0*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.5*		*"*	*39.9*		*102*	*85.9-114*			
Surrogate: Dibromofluoromethane	*43.8*		*"*	*39.9*		*110*	*77.8-142*			
LCS Dup (8102231-BSD1)				Prepared: 10/22/18 Analyzed: 10/23/18						
Chlorobenzene	80.9	5.0	ug/kg	99.8		81.0	75-125	0.421	20	
1,1-Dichloroethene	80.9	5.0	"	99.8		81.1	75-125	1.97	20	
Trichloroethene	85.7	5.0	"	99.8		85.9	75-125	13.0	20	
Benzene	92.4	5.0	"	99.8		92.6	75-125	9.32	20	
Toluene	82.6	5.0	"	99.8		82.8	75-125	0.00	20	
Surrogate: Toluene-d8	*39.6*		*"*	*39.9*		*99.1*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*45.0*		*"*	*39.9*		*113*	*85.9-114*			
Surrogate: Dibromofluoromethane	*41.5*		*"*	*39.9*		*104*	*77.8-142*			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	10/30/18 14:58

Notes and Definitions

R-07	Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.
QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

Kris Kubota, Project Manager Assistant

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave Ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steadman

Date: 10/20/18 Page: 5 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: S030.008.003
Batch #: T183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ Pb, As	8081 OCP	8082 PCB			Laboratory ID #	Comments/Preservative	Total # of containers
B28-0.5	10/20/18	1345	Soil	1802										X	X				01		
B29-0.5		1333												X	X				02		
B29-1.5		1334												X	X				03		
B29-2.5		1335												X	X				04		
B31-0.5-DUP		1321												X	X				05		
B31-1.5-DUP		1322												X	X				06		
B31-2.5-DUP		1324												X	X				07		
B31-0.5		1321												X	X				08		
B31-1.5		1322												X	X				09		
B31-2.5		1324												X	X				10		
B14-0.5		1035												X	X				11		
B14-1.5		1036												X	X				12		
B14-2.5		1037												X	X				13		
B25-0.5		1110												X	X				14		
B25-1.5		1111												X	X				15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	10-22-18 1425	[signature]	10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA (N)
Seals intact? Y/N/NA (N)
Received good condition/cold 35/43 3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171044

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman ave ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/20/18 Page: 6 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: 5020.008.003
Batch #: T183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ Pb, As	8081 OCP	8082 PCBs			Laboratory ID #	Comments/Preservative	Total # of containers
B25-2.5	10/20/18	1112	Soil	1 8oz										X	X				16		
B12-0.5		1020												X	X				17		
B12-1.5		1021												X	X				18		
B12-2.5		1022												X	X				19		
B52-0.5		0905												X	X				20		
B52-1.5		0906												X	X				21		
B52-2.5		0907												X	X				22		
B30-0.5		1050												X	X				23		
B30-1.5		1051												X	X				24		
B30-2.5		1052												X	X				25		
B19-0.5-DUP		0940												X	X				26		
B19-1.5-DUP		0941												X	X				27		
B19-2.5-DUP		0942												X	X				28		
B11-0.5		0920												X	X				29		
B11-1.5		0921												X	X				30		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1114	[signature]	10-22-18 1111
[signature]	10-22-18 1425	[signature]	10-22-18 14:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171045

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman ave ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clive Steedman

Date: 10/20/18 Page: 7 Of 8
Project Name: Hamilton H5
Collector: DP/WS Client Project #: S[illegible].008.003
Batch #: T183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ As, Pb	8081 OCPs	8082 PCBs	8270 C SIM	Laboratory ID #	Comments/Preservative	Total # of containers
B11-2.5	10/20/18	0922	Soil	1802										X	X			31		
B69-0.5		0810												X	X			32		
B69-1.5		0811												X	X			33		
B69-2.5		0812												X	X			34		
B19-0.5		0940												X	X			35		
B19-1.5		0941												X	X			36		
B19-2.5		0942												X	X			37		
B40-0.5		0817												X	X			38		
B40-1.5		0818												X	X			39		
B40-2.5		0819												X	X			40		
B93-0.5		0840												X	X			41		
B93-1.5		0841												X	X			42		
B93-2.5		0842												X	X			43		
B46-0.5		1230	Soil	1802, 5[illegible]	X			X				X	X	X	X	X	X	44	Z only 8260, 8015, 6010, 8082	
B46-0.5-DUP		1230	Soil	1802, 5[illegible]	X			X				X	X	X	X	X	X	45		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
[signature]	10-22-18 1425	[signature]	10-22-18 14:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes
TPH analyze for TPH-GRO and TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171046

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave Ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/20/18 Page: 8 Of 8
Project Name: Hamilton H5
Collector: DP/WS Client Project #: 5030.001.003
Batch #: 7183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCP	8082 PCBs	8270 C SIM	Laboratory ID #	Comments/Preservative	Total # of containers
B4G-1.5	10/20/18	1232	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	46	only 8015, 8260, 6010, 8082	
B4G-1.5-DUP		1232	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	47		
B4G-2.5-		1236	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	48		
B4G-2.5-DUP		1236	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	49		
FB-04		13:30	Water	2 250 Poly	X			X				X	X	X	X	X	X	50		
FB-04			Water	2 Amber	X			X				X	X	X	X	X	X	51		
FB-04			Water	6 Vor	X			X				X	X	X	X	X	X	52		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111		10-22-18 1111
	10-22-18 1425		10-22-18 14:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes
TPH = Analyze for TPH-GRO and TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171048

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T183212

Client Name: TERRAPHASE Project: HAMILTON HS

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN Date/Time Courier Received: 10/22/18 1111

Lab Received by: SUNNY Date/Time Lab Received: 10/22/18 1425

Total number of coolers received: 3

Temperature: Cooler #1 2.3	°C +/- the CF (1.2°C) = 3.5	°C corrected temperature	
Temperature: Cooler #2 3.1	°C +/- the CF (1.2°C) = 4.3	°C corrected temperature	
Temperature: Cooler #3 2.0	°C +/- the CF (1.2°C) = 3.2	°C corrected temperature	
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes**	☐ **No**
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date: BC

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # T183212

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☐ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☒ Other

Comments: B46-0.5 NO METHANOL IN CONTAINER

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Kris Kubota [kris@sunstarlabs.com]
Sent: Tuesday, October 23, 2018 2:20 PM
To: 'Clare Steedman'
Cc: 'Dan Phelps'
Subject: RE: Work Order and Chain of Custody Confirmation for Hamilton High School (T183212)
Attachments: image002.png; image003.png; image004.png

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Kris Kubota
Project Manager/Regional Account Manager

SunStar Laboratories

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From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Tuesday, October 23, 2018 2:13 PM
To: kris@sunstarlabs.com
Cc: Dan Phelps
Subject: RE: Work Order and Chain of Custody Confirmation for Hamilton High School (T183212)

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Clare Steedman, P.G.
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terraphase engineering

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Sent: 53 Ωay%+ #tob k 2*%20! @2-! 2 PE
To: ' gak 2t ΩmanC#gak t ΩmanB t kkaÚ6a .#omD
Cc: $ an P6 gÚ CΩan.Ú6 gÚ B t kkaÚ6a .#omD
Subject: = ok + kΩ k anΩ ' 6ain o, ' 3 toΩy ' on, ikmation , ok ; amigton ; i86 2#6oog. 5! @ 2! 2/

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⁺

Kris Kubota
Project Manager/Regional Account Manager

SunStar Laboratories ⁺

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#ontain⁺in,o⁺k⁺mation⁺t6at⁺i⁺ ⁺U⁺k⁺i7i⁺g 8 Ω⁺anΩ9o⁺k⁺#on,iΩ ntiag⁺Any⁺3na3t6o⁺k⁺i: Ω⁺3⁺ ⁺ %#oU⁺yin8%⁺Ωi⁺ t⁺k⁺ib3tion⁺o⁺k⁺Ωi⁺ #⁺g⁺ 3⁺k⁺ ⁺o,⁺t6i⁺ ⁺m ⁺ ⁺ a8 ⁺o⁺k⁺it⁺ ⁺
#ont nt.⁺ /⁺i⁺ ⁺ t⁺k⁺i#t⁺g⁺y⁺U⁺k⁺o6ibit Ω⁺anΩ⁺may⁺b ⁺3⁺n⁺g⁺aw,3⁺g⁺Any⁺a3t6o⁺k⁺i: Ω⁺k⁺ U⁺k⁺oΩ3#tion⁺o,⁺t6i⁺ ⁺m ⁺ ⁺ a8 ⁺o⁺k⁺atta#6m nt.⁺ /⁺m3⁺ t⁺b ⁺in⁺it⁺ ⁺ ntik⁺ ty.⁺ ,⁺
yo3⁺6a7 ⁺k⁺ # i7 Ω⁺t6i⁺ ⁺m ⁺ ⁺ a8 ⁺in⁺ ⁺k⁺o⁺k⁺%⁺U⁺g ⁺a ⁺ ⁺U⁺k⁺omU⁺t⁺g⁺y⁺noti,y⁺t6 ⁺ nΩ ⁺k⁺by⁺ mai⁺g⁺anΩ⁺Ω ⁺g t ⁺t6i⁺ ⁺m ⁺ ⁺ a8 ⁺,⁺k⁺om⁺yo3⁺k⁺ y⁺ t m.⁺
⁺

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Tuesday, October 23, 2018 2:08 PM
To: kris@sunstarlabs.com
Cc: Dan Phelps
Subject: RE: Work Order and Chain of Custody Confirmation for Hamilton High School (T183212)
⁺
; i⁺<⁺k⁺i⁺ %⁺
⁺
$ iΩ⁺yo3⁺ ⁺U⁺g⁺t⁺t6 ⁺ amU⁺g⁺ ⁺ ⁺into⁺two⁺wo⁺k⁺ ⁺o⁺k⁺Ω ⁺k⁺ G⁺56i⁺ ⁺wo⁺k⁺ ⁺o⁺k⁺Ω ⁺k⁺ong⁺y⁺ 6ow⁺ ⁺"⁺ + " ⁺U⁺a8 ⁺ ⁺5⁺t6⁺k⁺o386⁺@⁺
t⁺g⁺o' ⁺ ⁺8ooΩ⁺ 1# ⁺U⁺t⁺,o⁺k⁺ amU⁺g⁺ ⁺5! @⁺2! 2-50%⁺Ω-04%⁺U⁺g⁺ a⁺ ⁺aΩΩ⁺ 020⁺E ⁺ tag⁺ ⁺by⁺ " P-E 2⁺,o⁺k⁺A⁺ ⁺and⁺Pb⁺ong⁺y.⁺
56an' ⁺ .⁺
⁺

Clare Steedman, P.G.
2 nio⁺k⁺A⁺ o#iat ⁺? o⁺g⁺o8i⁺ t⁺
5 ⁺k⁺aU⁺6a⁺ ⁺ ⁺n8in ⁺k⁺in8⁺ n#.⁺
! @⁺40! ⁺Aon⁺<a⁺k⁺man⁺A7 n3 %⁺23it ⁺4! 0⁺0⁺ ⁺k⁺7in %⁺" a⁺g⁺,o⁺k⁺nia⁺) 2⁺ ! 2⁺0⁺www.t ⁺k⁺aU⁺6a⁺ ⁺ .#om⁺
U⁺6on -⁺) 4) .* .222 ⁺ 1t.⁺@⁺ ⁺0⁺# ⁺g⁺ ⁺2! *.422.5@⁺50⁺⁺
#⁺g⁺a⁺k⁺ ⁺ t ⁺ ⁺ ⁺ ⁺ ⁺manB t ⁺k⁺aU⁺6a⁺ ⁺ .#om⁺

terraphase engineering ⁺

This e-mail (including any attachments to it) is intended solely for the use of the individual(s) or entity named above. It may contain confidential or privileged information. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately and delete the original message.⁺
⁺

From: ⁺<⁺k⁺i⁺ ⁺<ubota⁺C⁺ ⁺k⁺i⁺ B ⁺ 3n⁺ ta⁺k⁺g⁺a⁺ .#omD⁺⁺
Sent: ⁺53 ⁺ Ωay%⁺ #tob ⁺k⁺2*%⁺20! @⁺) -*) ⁺AE ⁺
To: ⁺"⁺g⁺a⁺k⁺ ⁺2t ⁺ ⁺ ⁺ ⁺ ⁺man⁺C⁺#⁺g⁺a⁺k⁺ ⁺ t ⁺ ⁺ ⁺ ⁺manB t ⁺k⁺aU⁺6a⁺ ⁺ .#omD⁺
Cc: ⁺$ an⁺P6 ⁺g⁺U⁺ ⁺C⁺ ⁺ ⁺ ⁺an.U⁺6 ⁺g⁺U⁺ B t ⁺k⁺aU⁺6a⁺ ⁺ .#omD⁺
Subject: ⁺= ⁺o⁺k⁺' ⁺+ ⁺k⁺Ω ⁺k⁺anΩ⁺" 6ain⁺o,⁺" 3⁺ toΩy⁺" on,i⁺k⁺mation⁺,o⁺k⁺; ⁺ amig⁺on⁺; i86⁺2#6oog⁺.5! @⁺2! 2/⁺
⁺

Good Morning,

Attached is the work order confirmation and chain of custody we received at: 10/22/2018 at 14:25

Project: Hamilton High School
Project Number: 5030.008.003

Per Chain of Custody, the requested TAT is: 5-DAY STD
Results will be sent by COB: 10/29/2018

Please note the non-conformance. Sample B46-0.5, the 5035 kit has no methanol preservative. As of right now, it isn't a problem. If we need to run a dilution on the sample, we wil have to re-preserve the soil using a methanol VOA, and the final report would have a qualifier stating the 5035 kit was made in-house.

Please carefully review the attachments and feel free to contact me if you have any questions or concerns.

Thank you for choosing SunStar Labs!

Kris Kubota
Project Manager/Regional Account Manager

SunStar Laboratories

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Brian Charon	Date Logged In:	10/22/18 15:25

Samples Received at:	**3.5°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T183212-01 B28-2.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
T183212-02 B29-0.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183212-03 B29-1.5 [Soil] Sampled 10/20/18 13:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:34	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:34	
T183212-04 B29-2.5 [Soil] Sampled 10/20/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:35	
T183212-05 B31-0.5-dup [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-06 B31- 1.5-dup [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-07 B31- 2.5-dup [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-08 B31- 0.5 [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-09 B31- 1.5 [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-10 B31- 2.5 [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-11 B14- 0.5 [Soil] Sampled 10/20/18 10:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:35	
T183212-12 B14- 1.5 [Soil] Sampled 10/20/18 10:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:36	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:36	
T183212-13 B14- 2.5 [Soil] Sampled 10/20/18 10:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:37	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:37	
T183212-14 B25- 0.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183212-15 B25-1.5 [Soil] Sampled 10/20/18 11:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-16 B25- 2.5 [Soil] Sampled 10/20/18 11:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:12	
T183212-17 B12- 0.5 [Soil] Sampled 10/20/18 10:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:20	
T183212-18 B12- 1.5 [Soil] Sampled 10/20/18 10:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:21	
T183212-19 B12- 2.5 [Soil] Sampled 10/20/18 10:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:22	
T183212-20 B52-0.5 [Soil] Sampled 10/20/18 09:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:05	
T183212-21 B52- 1.5 [Soil] Sampled 10/20/18 09:06 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:06	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:06	
T183212-22 B52- 2.5 [Soil] Sampled 10/20/18 09:07 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:07	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:07	
T183212-23 B30- 0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
T183212-24 B30- 1.5 [Soil] Sampled 10/20/18 10:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:51	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-25 B30- 2.5 [Soil] Sampled 10/20/18 10:52 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:52	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:52	
T183212-26 B19-0.5-dup [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-27 B19- 1.5-dup [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-28 B19- 2.5 dup [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-29 B11- 0.5 [Soil] Sampled 10/20/18 09:20 (GMT-08:00) Pacific Time (US &				**water in sample container**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:20	
T183212-30 B11- 1.5 [Soil] Sampled 10/20/18 09:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:21	
T183212-31 B11- 2.5 [Soil] Sampled 10/20/18 09:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:22	
T183212-32 B69- 0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183212-33 B69- 1.5 [Soil] Sampled 10/20/18 08:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-34 B69- 2.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183212-35 B19- 0.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-36 B19- 1.5 [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-37 B19- 2.5 [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-38 B90- 0.5 [Soil] Sampled 10/20/18 08:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:17	
T183212-39 B90- 1.5 [Soil] Sampled 10/20/18 08:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:18	
T183212-40 B90- 2.5 [Soil] Sampled 10/20/18 08:19 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:19	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:19	
T183212-41 B93- 0.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183212-42 B93- 1.5 [Soil] Sampled 10/20/18 08:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:41	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-43 B93- 2.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183212-44 B46- 0.5 [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				**no methanol in voa**
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-45 B46- 0.5 dup [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-46 B46- 1.5 [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-47 B46- 1.5 dup [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-48 B46- 2.5 [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-49 B46- 2.5 dup [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-50 EB-04 [Water] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 13:30	
8015 CC (D/MO)	10/29/18 15:00	5	10/27/18 13:30	
8081 Pesticides	10/29/18 15:00	5	10/27/18 13:30	
8082 PCB	10/29/18 15:00	5	10/27/18 13:30	
8260	10/29/18 15:00	5	11/03/18 13:30	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Brian Charon	Date Logged In:	10/22/18 15:25

Samples Received at:	**3.5°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirm	No		

Analysis	Due	TAT	Expires	Comments
T183212-01 B28-2.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
T183212-02 B29-0.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183212-03 B29-1.5 [Soil] Sampled 10/20/18 13:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:34	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:34	
T183212-04 B29-2.5 [Soil] Sampled 10/20/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:35	
T183212-05 B31-0.5-dup [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-06 B31- 1.5-dup [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-07 B31- 2.5-dup [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-08 B31- 0.5 [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-09 B31- 1.5 [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-10 B31- 2.5 [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-11 B14- 0.5 [Soil] Sampled 10/20/18 10:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:35	
T183212-12 B14- 1.5 [Soil] Sampled 10/20/18 10:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:36	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:36	
T183212-13 B14- 2.5 [Soil] Sampled 10/20/18 10:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:37	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:37	
T183212-14 B25- 0.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183212-15 B25-1.5 [Soil] Sampled 10/20/18 11:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-16 B25- 2.5 [Soil] Sampled 10/20/18 11:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:12	
T183212-17 B12- 0.5 [Soil] Sampled 10/20/18 10:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:20	
T183212-18 B12- 1.5 [Soil] Sampled 10/20/18 10:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:21	
T183212-19 B12- 2.5 [Soil] Sampled 10/20/18 10:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:22	
T183212-20 B52-0.5 [Soil] Sampled 10/20/18 09:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:05	
T183212-21 B52- 1.5 [Soil] Sampled 10/20/18 09:06 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:06	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:06	
T183212-22 B52- 2.5 [Soil] Sampled 10/20/18 09:07 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:07	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:07	
T183212-23 B30- 0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
T183212-24 B30- 1.5 [Soil] Sampled 10/20/18 10:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:51	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-25 B30- 2.5 [Soil] Sampled 10/20/18 10:52 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:52	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:52	
T183212-26 B19-0.5-dup [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-27 B19- 1.5-dup [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-28 B19- 2.5 dup [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-29 B11- 0.5 [Soil] Sampled 10/20/18 09:20 (GMT-08:00) Pacific Time (US &				**water in sample container**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:20	
T183212-30 B11- 1.5 [Soil] Sampled 10/20/18 09:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:21	
T183212-31 B11- 2.5 [Soil] Sampled 10/20/18 09:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:22	
T183212-32 B69- 0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183212-33 B69- 1.5 [Soil] Sampled 10/20/18 08:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-34 B69- 2.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183212-35 B19- 0.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-36 B19- 1.5 [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-37 B19- 2.5 [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-38 B90- 0.5 [Soil] Sampled 10/20/18 08:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:17	
T183212-39 B90- 1.5 [Soil] Sampled 10/20/18 08:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:18	
T183212-40 B90- 2.5 [Soil] Sampled 10/20/18 08:19 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:19	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:19	
T183212-41 B93- 0.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183212-42 B93- 1.5 [Soil] Sampled 10/20/18 08:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:41	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-43 B93- 2.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183212-44 B46- 0.5 [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				**no methanol in voa**
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-45 B46- 0.5 dup [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-46 B46- 1.5 [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-47 B46- 1.5 dup [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-48 B46- 2.5 [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-49 B46- 2.5 dup [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-50 EB-04 [Water] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 13:30	
8015 CC (D/MO)	10/29/18 15:00	5	10/27/18 13:30	
8015 m Gas Purge	10/25/18 15:00	3	11/03/18 13:30	
8081 Pesticides	10/29/18 15:00	5	10/27/18 13:30	
8082 PCB	10/29/18 15:00	5	10/27/18 13:30	
8260	10/29/18 15:00	5	11/03/18 13:30	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Brian Charon	Date Logged In:	10/22/18 15:25

Samples Received at:	**3.5°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirm	No		

Analysis	Due	TAT	Expires	Comments
T183212-01 B28-2.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
T183212-02 B29-0.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183212-03 B29-1.5 [Soil] Sampled 10/20/18 13:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:34	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:34	
T183212-04 B29-2.5 [Soil] Sampled 10/20/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:35	
T183212-05 B31-0.5-dup [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-06 B31- 1.5-dup [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-07 B31- 2.5-dup [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-08 B31- 0.5 [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-09 B31- 1.5 [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-10 B31- 2.5 [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-11 B14- 0.5 [Soil] Sampled 10/20/18 10:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:35	
T183212-12 B14- 1.5 [Soil] Sampled 10/20/18 10:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:36	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:36	
T183212-13 B14- 2.5 [Soil] Sampled 10/20/18 10:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:37	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:37	
T183212-14 B25- 0.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183212-15 B25-1.5 [Soil] Sampled 10/20/18 11:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-16 B25- 2.5 [Soil] Sampled 10/20/18 11:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:12	
T183212-17 B12- 0.5 [Soil] Sampled 10/20/18 10:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:20	
T183212-18 B12- 1.5 [Soil] Sampled 10/20/18 10:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:21	
T183212-19 B12- 2.5 [Soil] Sampled 10/20/18 10:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:22	
T183212-20 B52-0.5 [Soil] Sampled 10/20/18 09:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:05	
T183212-21 B52- 1.5 [Soil] Sampled 10/20/18 09:06 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:06	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:06	
T183212-22 B52- 2.5 [Soil] Sampled 10/20/18 09:07 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:07	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:07	
T183212-23 B30- 0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
T183212-24 B30- 1.5 [Soil] Sampled 10/20/18 10:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:51	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-25 B30- 2.5 [Soil] Sampled 10/20/18 10:52 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:52	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:52	
T183212-26 B19-0.5-dup [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-27 B19- 1.5-dup [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-28 B19- 2.5 dup [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-29 B11- 0.5 [Soil] Sampled 10/20/18 09:20 (GMT-08:00) Pacific Time (US &				**water in sample container**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:20	
T183212-30 B11- 1.5 [Soil] Sampled 10/20/18 09:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:21	
T183212-31 B11- 2.5 [Soil] Sampled 10/20/18 09:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:22	
T183212-32 B69- 0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183212-33 B69- 1.5 [Soil] Sampled 10/20/18 08:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-34 B69- 2.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183212-35 B19- 0.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-36 B19- 1.5 [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-37 B19- 2.5 [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-38 B90- 0.5 [Soil] Sampled 10/20/18 08:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:17	
T183212-39 B90- 1.5 [Soil] Sampled 10/20/18 08:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:18	
T183212-40 B90- 2.5 [Soil] Sampled 10/20/18 08:19 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:19	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:19	
T183212-41 B93- 0.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183212-42 B93- 1.5 [Soil] Sampled 10/20/18 08:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:41	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-43 B93- 2.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183212-44 B46- 0.5 [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				**no methanol in voa**
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-45 B46- 0.5 dup [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-46 B46- 1.5 [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-47 B46- 1.5 dup [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-48 B46- 2.5 [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-49 B46- 2.5 dup [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-50 EB-04 [Water] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 13:30	
6020 Metals by ICP-MS	10/29/18 15:00	5	04/18/19 13:30	As and Pb only
8015 CC (D/MO)	10/29/18 15:00	5	10/27/18 13:30	
8015 m Gas Purge	10/25/18 15:00	3	11/03/18 13:30	
8081 Pesticides	10/29/18 15:00	5	10/27/18 13:30	
8082 PCB	10/29/18 15:00	5	10/27/18 13:30	
8260	10/29/18 15:00	5	11/03/18 13:30	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

28 November 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 14:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi For Kris Kubota
Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B25- 0.5	T183212-14	Soil	10/20/18 11:10	10/22/18 14:25
B12- 0.5	T183212-17	Soil	10/20/18 10:20	10/22/18 14:25

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:08

DETECTIONS SUMMARY

Sample ID: B25- 0.5 **Laboratory ID:** T183212-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**4.6**	0.10	mg/l	STLC Waste Extraction T	

Sample ID: B12- 0.5 **Laboratory ID:** T183212-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**27**	0.10	mg/l	STLC Waste Extraction T	

SunStar Laboratories, Inc.

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Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:08

B25- 0.5

T183212-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
STLC Metals by 6000/7000 Series Methods									
Lead	**4.6**	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	

SunStar Laboratories, Inc.

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Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:08

B12- 0.5

T183212-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
STLC Metals by 6000/7000 Series Methods									
Lead	**27**	0.10	mg/l	1	8111923	11/19/18	11/26/18	STLC Waste Extraction Test	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:08

STLC Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8111923 - STLC Metals										
Blank (8111923-BLK1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	ND	0.10	mg/l							
Arsenic	ND	0.10	"							
LCS (8111923-BS1)				Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	9.57	0.10	mg/l	10.0		95.7	75-125			
Arsenic	10.9	0.10	"	10.0		109	75-125			
Matrix Spike (8111923-MS1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.4	0.10	mg/l	10.0	3.56	88.2	75-125			
Arsenic	10.1	0.10	"	10.0	0.846	92.5	75-125			
Matrix Spike Dup (8111923-MSD1)		**Source: T182803-28**		Prepared: 11/19/18 Analyzed: 11/26/18						
Lead	12.6	0.10	mg/l	10.0	3.56	90.3	75-125	1.64	30	
Arsenic	10.8	0.10	"	10.0	0.846	99.4	75-125	6.61	30	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/28/18 16:08

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

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Mike Jaroudi For Kris Kubota, Project Manager Assistant

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave Ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steadman

Date: 10/20/18 Page: 5 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: S030.008.003
Batch #: T183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ Pb, As	8081 OCP	8082 PCB			Laboratory ID #	Comments/Preservative	Total # of containers
B28-0.5	10/20/18	1345	Soil	1802										X	X				01		
B29-0.5		1333												X	X				02		
B29-1.5		1334												X	X				03		
B29-2.5		1335												X	X				04		
B31-0.5-DUP		1321												X	X				05		
B31-1.5-DUP		1322												X	X				06		
B31-2.5-DUP		1324												X	X				07		
B31-0.5		1321												X	X				08		
B31-1.5		1322												X	X				09		
B31-2.5		1324												X	X				10		
B14-0.5		1035												X	X				11		
B14-1.5		1036												X	X				12		
B14-2.5		1037												X	X				13		
B25-0.5		1110												X	X				14		
B25-1.5		1111												X	X				15		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	10-22-18 1425	[signature]	10-22-18 14:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA (N)
Seals intact? Y/N/NA (N)
Received good condition/cold 35/43 3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171044

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman ave ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/20/18 Page: 6 Of 8
Project Name: Hamilton HS
Collector: DP/WS Client Project #: 5020.008.003
Batch #: T183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ Pb, As	8081 OCP	8082 PCBs			Laboratory ID #	Comments/Preservative	Total # of containers
B25-2.5	10/20/18	1112	Soil	1 8oz										X	X				16		
B12-0.5		1020												X	X				17		
B12-1.5		1021												X	X				18		
B12-2.5		1022												X	X				19		
B52-0.5		0905												X	X				20		
B52-1.5		0906												X	X				21		
B52-2.5		0907												X	X				22		
B30-0.5		1050												X	X				23		
B30-1.5		1051												X	X				24		
B30-2.5		1052												X	X				25		
B19-0.5-DUP		0940												X	X				26		
B19-1.5-DUP		0941												X	X				27		
B19-2.5-DUP		0942												X	X				28		
B11-0.5		0920												X	X				29		
B11-1.5		0921												X	X				30		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1114	[signature]	10-22-18 1111
[signature]	10-22-18 1425	[signature]	10-22-18 14:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171045

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman ave ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clive Steedman

Date: 10/20/18 Page: 7 Of 8
Project Name: Hamilton H5
Collector: DP/WS Client Project #: S[illegible].008.003
Batch #: T183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS ~~Metals~~ As, Pb	8081 OCPs	8082 PCBs	8270 C SIM	Laboratory ID #	Comments/Preservative	Total # of containers
B11-2.5	10/20/18	0922	Soil	1802										X	X			31		
B69-0.5		0810												X	X			32		
B69-1.5		0811												X	X			33		
B69-2.5		0812												X	X			34		
B19-0.5		0940												X	X			35		
B19-1.5		0941												X	X			36		
B19-2.5		0942												X	X			37		
B40-0.5		0817												X	X			38		
B40-1.5		0818												X	X			39		
B40-2.5		0819												X	X			40		
B93-0.5		0840												X	X			41		
B93-1.5		0841												X	X			42		
B93-2.5		0842												X	X			43		
B46-0.5		1230	Soil	1802, 5[illegible]	X			X				X	X	X	X	X	X	44	Z only 8260, 8015, 6010, 8082	
B46-0.5-DUP		1230	Soil	1802, 5[illegible]	X			X				X	X	X	X	X	X	45		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111	[signature]	10-22-18 1111
[signature]	10-22-18 1425	[signature]	10-22-18 14:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes
TPH analyze for TPH-GRO and TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 171046

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave Ste 410 Irvine CA
Phone: 949-377-2227 Fax:
Project Manager: Clare Steedman

Date: 10/20/18 Page: 8 Of 8
Project Name: Hamilton H5
Collector: DP/WS Client Project #: 5030.001.003
Batch #: 7183212 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCP	8082 PCBs	8270 C SIM	Laboratory ID #	Comments/Preservative	Total # of containers
B4G-1.5	10/20/18	1232	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	46	only 8015, 8260, 6010, 8082	
B4G-1.5-DUP		1232	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	47		
B4G-2.5-		1236	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	48		
B4G-2.5-DUP		1236	Soil	1 8oz, 5vor	X			X				X	X	X	X	X	X	49		
FB-04		13:30	Water	2 250 Poly	X			X				X	X	X	X	X	X	50		
FB-04			Water	2 Amber	X			X				X	X	X	X	X	X	51		
FB-04			Water	6 Vor	X			X				X	X	X	X	X	X	52		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
WS	10/22/18 1111		10-22-18 1111
	10-22-18 1425		10-22-18 14:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 3.5/4.3 3.2

Turn around time: STD

Notes
TPH = Analyze for TPH-GRO and TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 171048

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T183212

Client Name: TERRAPHASE Project: HAMILTON HS

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: DAN Date/Time Courier Received: 10/22/18 1111

Lab Received by: SUNNY Date/Time Lab Received: 10/22/18 1425

Total number of coolers received: 3

Temperature: Cooler #1 2.3	°C +/- the CF (1.2°C) = 3.5	°C corrected temperature	
Temperature: Cooler #2 3.1	°C +/- the CF (1.2°C) = 4.3	°C corrected temperature	
Temperature: Cooler #3 2.0	°C +/- the CF (1.2°C) = 3.2	°C corrected temperature	
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes**	☐ **No**
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date: BC

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # T183212

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☐ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☒ Other

Comments: B46-0.5 NO METHANOL IN CONTAINER

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

Kris Kubota

From: Kris Kubota [kris@sunstarlabs.com]
Sent: Tuesday, October 23, 2018 2:20 PM
To: 'Clare Steedman'
Cc: 'Dan Phelps'
Subject: RE: Work Order and Chain of Custody Confirmation for Hamilton High School (T183212)
Attachments: image002.png; image003.png; image004.png

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Kris Kubota
Project Manager/Regional Account Manager

SunStar Laboratories

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From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Tuesday, October 23, 2018 2:13 PM
To: kris@sunstarlabs.com
Cc: Dan Phelps
Subject: RE: Work Order and Chain of Custody Confirmation for Hamilton High School (T183212)

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Clare Steedman, P.G.
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terraphase engineering

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To: ' gak 2t ΩmanC#gak t ΩmanB t kkaÚ6a .#omD
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Kris Kubota
Project Manager/Regional Account Manager

SunStar Laboratories ⁺

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⁺

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Tuesday, October 23, 2018 2:08 PM
To: kris@sunstarlabs.com
Cc: Dan Phelps
Subject: RE: Work Order and Chain of Custody Confirmation for Hamilton High School (T183212)
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Clare Steedman, P.G.
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terraphase engineering ⁺

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From: ⁺<⁺k⁺i⁺ ⁺<ubota⁺C⁺ ⁺k⁺i⁺ B ⁺ 3n⁺ ta⁺k⁺g⁺a⁺ .#omD⁺⁺
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Cc: ⁺$ an⁺P6 ⁺g⁺U⁺ ⁺C⁺ ⁺ ⁺ ⁺an.U⁺6 ⁺g⁺U⁺ B t ⁺k⁺aU⁺6a⁺ ⁺ .#omD⁺
Subject: ⁺= ⁺o⁺k⁺' ⁺+ ⁺k⁺Ω ⁺k⁺anΩ⁺" 6ain⁺o,⁺" 3⁺ toΩy⁺" on,i⁺k⁺mation⁺,o⁺k⁺; ⁺ amig⁺on⁺; i86⁺2#6oog⁺.5! @⁺2! 2/⁺
⁺

Good Morning,

Attached is the work order confirmation and chain of custody we received at: 10/22/2018 at 14:25

Project: Hamilton High School
Project Number: 5030.008.003

Per Chain of Custody, the requested TAT is: 5-DAY STD
Results will be sent by COB: 10/29/2018

Please note the non-conformance. Sample B46-0.5, the 5035 kit has no methanol preservative. As of right now, it isn't a problem. If we need to run a dilution on the sample, we wil have to re-preserve the soil using a methanol VOA, and the final report would have a qualifier stating the 5035 kit was made in-house.

Please carefully review the attachments and feel free to contact me if you have any questions or concerns.

Thank you for choosing SunStar Labs!

Kris Kubota
Project Manager/Regional Account Manager

SunStar Laboratories

From: Rose Fasheh [Rose@sunstarlabs.com]
Sent: Monday, November 19, 2018 11:37 AM
To: 'Clare Steedman'
Cc: 'Mike'
Subject: Additional Request: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898
Attachments: T182803_WKO_02.pdf; T182898_WKO_02.pdf; T183211_WKO_02.pdf; T183212_WKO_03.pdf

Clare,

Please find attached revised work orders reflecting the additional STLC testing. Details are documented in the comments section (right hand side). We will have the additional STLC results for you before end of day Wednesday 11/28 as a standard 5-day TAT.

Let us know if you need anything else!

Happy Thanksgiving ☺

Rose Fasheh
Project Manager

SunStar Laboratories

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
Please note that SunStar Laboratories will be observing the Thanksgiving Holidays on Thursday and Friday, November 22nd and 23rd. In addition, GSO will not have scheduled service on Thursday, November 22nd. If you have any short hold samples arriving near or during these days, please contact your Project Manager in advance to ensure all holding times are met for your samples. SunStar will be available on Saturday, November 24th if needed to receive samples. Please let your Project Manager know if you will ship or deliver samples on this day.

We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:19 AM
To: Rose Fasheh
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Rose,

Thanks for the heads up. Standard turn is fine.

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Rose Fasheh <Rose@sunstarlabs.com>
Sent: Monday, November 19, 2018 11:18 AM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Good morning Clare,

Kris no longer works with SunStar, but I will go ahead and get those going for you. Is a standard 5-day TAT okay, or did you need the results expedited?

Thank you,

Rose Fasheh
Project Manager

25712 Commercentre Dr., Lake Forest, CA 92630
Office: (949) 297-5020 | Fax: (949) 297-5027
CA ELAP Certification: 2250 | CA Small Business Certification: 31511

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Shipping Alert:
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We appreciate your business and hope that you have a wonderful and safe holiday!

From: Clare Steedman [mailto:clare.steedman@terraphase.com]
Sent: Monday, November 19, 2018 11:12 AM
To: kris@sunstarlabs.com
Subject: LAUSD Hamilton STLC Analyses; Lab Reports T182803, T183211, T183212, and T182898

Hi Kris,

Would you please analyze the following samples for **STLC** analysis?

B03-1.5 (T182803-28) for lead
B10-0.5 (T182803-42) for lead

B91-1.5 (T183211-05) for lead

B12-0.5 (T183212-17) for lead
B25-05 (T183212-14) for lead

B18-2.5 (T182898-28) for arsenic

Thank you,

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Brian Charon	Date Logged In:	10/22/18 15:25

Samples Received at:	**3.5°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T183212-01 B28-2.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
T183212-02 B29-0.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183212-03 B29-1.5 [Soil] Sampled 10/20/18 13:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:34	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:34	
T183212-04 B29-2.5 [Soil] Sampled 10/20/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:35	
T183212-05 B31-0.5-dup [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-06 B31- 1.5-dup [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-07 B31- 2.5-dup [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-08 B31- 0.5 [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-09 B31- 1.5 [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-10 B31- 2.5 [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-11 B14- 0.5 [Soil] Sampled 10/20/18 10:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:35	
T183212-12 B14- 1.5 [Soil] Sampled 10/20/18 10:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:36	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:36	
T183212-13 B14- 2.5 [Soil] Sampled 10/20/18 10:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:37	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:37	
T183212-14 B25- 0.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183212-15 B25-1.5 [Soil] Sampled 10/20/18 11:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-16 B25- 2.5 [Soil] Sampled 10/20/18 11:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:12	
T183212-17 B12- 0.5 [Soil] Sampled 10/20/18 10:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:20	
T183212-18 B12- 1.5 [Soil] Sampled 10/20/18 10:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:21	
T183212-19 B12- 2.5 [Soil] Sampled 10/20/18 10:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:22	
T183212-20 B52-0.5 [Soil] Sampled 10/20/18 09:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:05	
T183212-21 B52- 1.5 [Soil] Sampled 10/20/18 09:06 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:06	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:06	
T183212-22 B52- 2.5 [Soil] Sampled 10/20/18 09:07 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:07	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:07	
T183212-23 B30- 0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
T183212-24 B30- 1.5 [Soil] Sampled 10/20/18 10:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:51	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-25 B30- 2.5 [Soil] Sampled 10/20/18 10:52 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:52	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:52	
T183212-26 B19-0.5-dup [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-27 B19- 1.5-dup [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-28 B19- 2.5 dup [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-29 B11- 0.5 [Soil] Sampled 10/20/18 09:20 (GMT-08:00) Pacific Time (US &				**water in sample container**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:20	
T183212-30 B11- 1.5 [Soil] Sampled 10/20/18 09:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:21	
T183212-31 B11- 2.5 [Soil] Sampled 10/20/18 09:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:22	
T183212-32 B69- 0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183212-33 B69- 1.5 [Soil] Sampled 10/20/18 08:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-34 B69- 2.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183212-35 B19- 0.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-36 B19- 1.5 [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-37 B19- 2.5 [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-38 B90- 0.5 [Soil] Sampled 10/20/18 08:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:17	
T183212-39 B90- 1.5 [Soil] Sampled 10/20/18 08:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:18	
T183212-40 B90- 2.5 [Soil] Sampled 10/20/18 08:19 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:19	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:19	
T183212-41 B93- 0.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183212-42 B93- 1.5 [Soil] Sampled 10/20/18 08:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:41	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-43 B93- 2.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183212-44 B46- 0.5 [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				**no methanol in voa**
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-45 B46- 0.5 dup [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-46 B46- 1.5 [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-47 B46- 1.5 dup [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-48 B46- 2.5 [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-49 B46- 2.5 dup [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-50 EB-04 [Water] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 13:30	
8015 CC (D/MO)	10/29/18 15:00	5	10/27/18 13:30	
8081 Pesticides	10/29/18 15:00	5	10/27/18 13:30	
8082 PCB	10/29/18 15:00	5	10/27/18 13:30	
8260	10/29/18 15:00	5	11/03/18 13:30	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: **Terraphase Engineering - Irvine**
Project: **Hamilton Highschool**
Project Manager: **Kris Kubota**
Project Number: **5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Brian Charon	Date Logged In:	10/22/18 15:25

Samples Received at:	**3.5°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confirm	No		

Analysis	Due	TAT	Expires	Comments
T183212-01 B28-2.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
T183212-02 B29-0.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183212-03 B29-1.5 [Soil] Sampled 10/20/18 13:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:34	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:34	
T183212-04 B29-2.5 [Soil] Sampled 10/20/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:35	
T183212-05 B31-0.5-dup [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-06 B31- 1.5-dup [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-07 B31- 2.5-dup [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-08 B31- 0.5 [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-09 B31- 1.5 [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-10 B31- 2.5 [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-11 B14- 0.5 [Soil] Sampled 10/20/18 10:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:35	
T183212-12 B14- 1.5 [Soil] Sampled 10/20/18 10:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:36	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:36	
T183212-13 B14- 2.5 [Soil] Sampled 10/20/18 10:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:37	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:37	
T183212-14 B25- 0.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
T183212-15 B25-1.5 [Soil] Sampled 10/20/18 11:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-16 B25- 2.5 [Soil] Sampled 10/20/18 11:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:12	
T183212-17 B12- 0.5 [Soil] Sampled 10/20/18 10:20 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:20	
T183212-18 B12- 1.5 [Soil] Sampled 10/20/18 10:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:21	
T183212-19 B12- 2.5 [Soil] Sampled 10/20/18 10:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:22	
T183212-20 B52-0.5 [Soil] Sampled 10/20/18 09:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:05	
T183212-21 B52- 1.5 [Soil] Sampled 10/20/18 09:06 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:06	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:06	
T183212-22 B52- 2.5 [Soil] Sampled 10/20/18 09:07 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:07	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:07	
T183212-23 B30- 0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
T183212-24 B30- 1.5 [Soil] Sampled 10/20/18 10:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:51	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:51	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-25 B30- 2.5 [Soil] Sampled 10/20/18 10:52 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:52	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:52	
T183212-26 B19-0.5-dup [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-27 B19- 1.5-dup [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-28 B19- 2.5 dup [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-29 B11- 0.5 [Soil] Sampled 10/20/18 09:20 (GMT-08:00) Pacific Time (US &				**water in sample container**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:20	
T183212-30 B11- 1.5 [Soil] Sampled 10/20/18 09:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:21	
T183212-31 B11- 2.5 [Soil] Sampled 10/20/18 09:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:22	
T183212-32 B69- 0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183212-33 B69- 1.5 [Soil] Sampled 10/20/18 08:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:11	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-34 B69- 2.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183212-35 B19- 0.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-36 B19- 1.5 [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-37 B19- 2.5 [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-38 B90- 0.5 [Soil] Sampled 10/20/18 08:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:17	
T183212-39 B90- 1.5 [Soil] Sampled 10/20/18 08:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:18	
T183212-40 B90- 2.5 [Soil] Sampled 10/20/18 08:19 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:19	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:19	
T183212-41 B93- 0.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183212-42 B93- 1.5 [Soil] Sampled 10/20/18 08:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:41	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-43 B93- 2.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	
T183212-44 B46- 0.5 [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				**no methanol in voa**
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-45 B46- 0.5 dup [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-46 B46- 1.5 [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-47 B46- 1.5 dup [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-48 B46- 2.5 [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-49 B46- 2.5 dup [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-50 EB-04 [Water] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	04/18/19 13:30	
8015 CC (D/MO)	10/29/18 15:00	5	10/27/18 13:30	
8015 m Gas Purge	10/25/18 15:00	3	11/03/18 13:30	
8081 Pesticides	10/29/18 15:00	5	10/27/18 13:30	
8082 PCB	10/29/18 15:00	5	10/27/18 13:30	
8260	10/29/18 15:00	5	11/03/18 13:30	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/19/2018 11:28:57AM

WORK ORDER

T183212

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	10/29/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/22/18 14:25
Logged In By:	Brian Charon	Date Logged In:	10/22/18 15:25

Samples Received at:	**3.5°C**		
Custody Seals	No	Received On Ice	No
Containers Intact	No		
COC/Labels Agree	No		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T183212-01 B28-2.5 [Soil] Sampled 10/20/18 13:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:45	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:45	
T183212-02 B29-0.5 [Soil] Sampled 10/20/18 13:33 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:33	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:33	
T183212-03 B29-1.5 [Soil] Sampled 10/20/18 13:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:34	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:34	
T183212-04 B29-2.5 [Soil] Sampled 10/20/18 13:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:35	
T183212-05 B31-0.5-dup [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-06 B31- 1.5-dup [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-07 B31- 2.5-dup [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-08 B31- 0.5 [Soil] Sampled 10/20/18 13:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:21	
T183212-09 B31- 1.5 [Soil] Sampled 10/20/18 13:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:22	
T183212-10 B31- 2.5 [Soil] Sampled 10/20/18 13:24 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 13:24	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 13:24	
T183212-11 B14- 0.5 [Soil] Sampled 10/20/18 10:35 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:35	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:35	
T183212-12 B14- 1.5 [Soil] Sampled 10/20/18 10:36 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:36	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:36	
T183212-13 B14- 2.5 [Soil] Sampled 10/20/18 10:37 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:37	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:37	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-14 B25- 0.5 [Soil] Sampled 10/20/18 11:10 (GMT-08:00) Pacific Time (US &				**STLC for Lead added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:10	
STLC Pb	11/28/18 15:00	5	04/18/19 11:10	
STLC Leaching Procedure Metals	11/28/18 15:00	5	11/03/18 11:10	
T183212-15 B25-1.5 [Soil] Sampled 10/20/18 11:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:11	
T183212-16 B25- 2.5 [Soil] Sampled 10/20/18 11:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 11:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 11:12	
T183212-17 B12- 0.5 [Soil] Sampled 10/20/18 10:20 (GMT-08:00) Pacific Time (US &				**STLC for Lead added per client request (Clare, 11/19)**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:20	
STLC Pb	11/28/18 15:00	5	04/18/19 10:20	
STLC Leaching Procedure Metals	11/28/18 15:00	5	11/03/18 10:20	
T183212-18 B12- 1.5 [Soil] Sampled 10/20/18 10:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:21	
T183212-19 B12- 2.5 [Soil] Sampled 10/20/18 10:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:22	
T183212-20 B52-0.5 [Soil] Sampled 10/20/18 09:05 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:05	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:05	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-21 B52- 1.5 [Soil] Sampled 10/20/18 09:06 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:06	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:06	
T183212-22 B52- 2.5 [Soil] Sampled 10/20/18 09:07 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:07	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:07	
T183212-23 B30- 0.5 [Soil] Sampled 10/20/18 10:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:50	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:50	
T183212-24 B30- 1.5 [Soil] Sampled 10/20/18 10:51 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:51	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:51	
T183212-25 B30- 2.5 [Soil] Sampled 10/20/18 10:52 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 10:52	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 10:52	
T183212-26 B19-0.5-dup [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-27 B19- 1.5-dup [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	
T183212-28 B19- 2.5 dup [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-29 B11- 0.5 [Soil] Sampled 10/20/18 09:20 (GMT-08:00) Pacific Time (US &				**water in sample container**
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:20	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:20	
T183212-30 B11- 1.5 [Soil] Sampled 10/20/18 09:21 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:21	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:21	
T183212-31 B11- 2.5 [Soil] Sampled 10/20/18 09:22 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:22	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:22	
T183212-32 B69- 0.5 [Soil] Sampled 10/20/18 08:10 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:10	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:10	
T183212-33 B69- 1.5 [Soil] Sampled 10/20/18 08:11 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:11	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:11	
T183212-34 B69- 2.5 [Soil] Sampled 10/20/18 08:12 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:12	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:12	
T183212-35 B19- 0.5 [Soil] Sampled 10/20/18 09:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:40	
T183212-36 B19- 1.5 [Soil] Sampled 10/20/18 09:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:41	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-37 B19- 2.5 [Soil] Sampled 10/20/18 09:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 09:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 09:42	
T183212-38 B90- 0.5 [Soil] Sampled 10/20/18 08:17 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:17	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:17	
T183212-39 B90- 1.5 [Soil] Sampled 10/20/18 08:18 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:18	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:18	
T183212-40 B90- 2.5 [Soil] Sampled 10/20/18 08:19 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:19	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:19	
T183212-41 B93- 0.5 [Soil] Sampled 10/20/18 08:40 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:40	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:40	
T183212-42 B93- 1.5 [Soil] Sampled 10/20/18 08:41 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:41	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:41	
T183212-43 B93- 2.5 [Soil] Sampled 10/20/18 08:42 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	10/29/18 15:00	5	02/17/19 08:42	As and Pb only
8081 Pesticides	10/29/18 15:00	5	11/03/18 08:42	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Kris Kubota
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183212-44 B46- 0.5 [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				**no methanol in voa**
6010 Title 22	10/29/18 15:00	5	10/25/18 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-45 B46- 0.5 dup [Soil] Sampled 10/20/18 12:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:30	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:30	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:30	
8082 PCB	10/29/18 15:00	5	11/03/18 12:30	
8260 5035	10/29/18 15:00	5	11/03/18 12:30	
T183212-46 B46- 1.5 [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-47 B46- 1.5 dup [Soil] Sampled 10/20/18 12:32 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:32	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:32	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:32	
8082 PCB	10/29/18 15:00	5	11/03/18 12:32	
8260 5035	10/29/18 15:00	5	11/03/18 12:32	
T183212-48 B46- 2.5 [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183212

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Kris Kubota**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Analysis	Due	TAT	Expires	Comments
T183212-49 B46- 2.5 dup [Soil] Sampled 10/20/18 12:36 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 12:36	
8015 CC (D/MO)	10/29/18 15:00	5	11/03/18 12:36	
8015 m 5035-GRO	10/29/18 15:00	5	11/03/18 12:36	
8082 PCB	10/29/18 15:00	5	11/03/18 12:36	
8260 5035	10/29/18 15:00	5	11/03/18 12:36	
T183212-50 EB-04 [Water] Sampled 10/20/18 13:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	10/29/18 15:00	5	10/25/18 13:30	
6020 Metals by ICP-MS	10/29/18 15:00	5	04/18/19 13:30	As and Pb only
8015 CC (D/MO)	10/29/18 15:00	5	10/27/18 13:30	
8015 m Gas Purge	10/25/18 15:00	3	11/03/18 13:30	
8081 Pesticides	10/29/18 15:00	5	10/27/18 13:30	
8082 PCB	10/29/18 15:00	5	10/27/18 13:30	
8260	10/29/18 15:00	5	11/03/18 13:30	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
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30 November 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 11/20/18 17:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B60-0.5	T183454-01	Soil	11/19/18 08:00	11/20/18 17:25
B60-1.5	T183454-02	Soil	11/19/18 08:02	11/20/18 17:25
B60-2.5	T183454-03	Soil	11/19/18 08:04	11/20/18 17:25
B60-5.0	T183454-04	Soil	11/19/18 08:30	11/20/18 17:25
B62-0.5	T183454-05	Soil	11/19/18 08:45	11/20/18 17:25
B62-1.5	T183454-06	Soil	11/19/18 08:47	11/20/18 17:25
B62-2.5	T183454-07	Soil	11/19/18 08:49	11/20/18 17:25
B62-5.0	T183454-08	Soil	11/19/18 08:55	11/20/18 17:25
B55-0.5	T183454-09	Soil	11/19/18 09:55	11/20/18 17:25
B55-1.5	T183454-10	Soil	11/19/18 09:57	11/20/18 17:25
B55-2.5	T183454-11	Soil	11/19/18 09:59	11/20/18 17:25
B55-5.0	T183454-12	Soil	11/19/18 10:05	11/20/18 17:25
B55-0.5-DUP	T183454-13	Soil	11/19/18 09:56	11/20/18 17:25
B55-1.5-DUP	T183454-14	Soil	11/19/18 09:58	11/20/18 17:25
B55-2.5-DUP	T183454-15	Soil	11/19/18 10:00	11/20/18 17:25
B55-5.0-DUP	T183454-16	Soil	11/19/18 10:06	11/20/18 17:25
B56-0.5	T183454-17	Soil	11/19/18 10:30	11/20/18 17:25
B56-1.5	T183454-18	Soil	11/19/18 10:32	11/20/18 17:25
B56-2.5	T183454-19	Soil	11/19/18 10:34	11/20/18 17:25
B56-5.0	T183454-20	Soil	11/19/18 10:40	11/20/18 17:25
B20-0.5	T183454-21	Soil	11/19/18 11:30	11/20/18 17:25
B20-1.5	T183454-22	Soil	11/19/18 11:32	11/20/18 17:25
B20-2.5	T183454-23	Soil	11/19/18 11:34	11/20/18 17:25
B21-0.5	T183454-24	Soil	11/19/18 11:45	11/20/18 17:25
B21-1.5	T183454-25	Soil	11/19/18 11:47	11/20/18 17:25
B21-2.5	T183454-26	Soil	11/19/18 11:49	11/20/18 17:25

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B50-0.5	T183454-27	Soil	11/19/18 12:00	11/20/18 17:25
B50-1.5	T183454-28	Soil	11/19/18 12:02	11/20/18 17:25
B50-2.5	T183454-29	Soil	11/19/18 12:04	11/20/18 17:25
EB-05	T183454-30	Water	11/19/18 12:50	11/20/18 17:25

SunStar Laboratories, Inc.

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Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

DETECTIONS SUMMARY

Sample ID: B60-0.5 **Laboratory ID:** T183454-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**14**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B60-1.5 **Laboratory ID:** T183454-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.1**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B60-2.5 **Laboratory ID:** T183454-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.23	mg/kg	6020 ICP-MS	
Lead	**5.2**	0.23	mg/kg	6020 ICP-MS	

Sample ID: B60-5.0 **Laboratory ID:** T183454-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**25**	5.0	mg/kg	EPA 6010b	
Barium	**100**	1.0	mg/kg	EPA 6010b	
Chromium	**33**	2.0	mg/kg	EPA 6010b	
Cobalt	**13**	2.0	mg/kg	EPA 6010b	
Copper	**29**	1.0	mg/kg	EPA 6010b	
Nickel	**19**	2.0	mg/kg	EPA 6010b	
Vanadium	**69**	5.0	mg/kg	EPA 6010b	
Zinc	**61**	1.0	mg/kg	EPA 6010b	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Sample ID: B62-0.5 **Laboratory ID:** T183454-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**12**	0.25	mg/kg	6020 ICP-MS	
Lead	**5.4**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B62-1.5 **Laboratory ID:** T183454-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.0**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B62-2.5 **Laboratory ID:** T183454-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.9**	0.25	mg/kg	6020 ICP-MS	
Lead	**3.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B62-5.0 **Laboratory ID:** T183454-08

Analyte	Result	Reporting Limit	Units	Method	Notes
C29-C40 (MORO)	**50**	10	mg/kg	EPA 8015B	
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**32**	2.0	mg/kg	EPA 6010b	
Cobalt	**13**	2.0	mg/kg	EPA 6010b	
Copper	**28**	1.0	mg/kg	EPA 6010b	
Nickel	**23**	2.0	mg/kg	EPA 6010b	
Vanadium	**68**	5.0	mg/kg	EPA 6010b	
Zinc	**63**	1.0	mg/kg	EPA 6010b	

Sample ID: B55-0.5 **Laboratory ID:** T183454-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**8.1**	0.25	mg/kg	6020 ICP-MS	
Lead	**15**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B55-1.5 **Laboratory ID:** T183454-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B55-2.5 **Laboratory ID:** T183454-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B55-5.0 **Laboratory ID:** T183454-12

Analyte	Result	Reporting Limit	Units	Method	Notes
C29-C40 (MORO)	**24**	10	mg/kg	EPA 8015B	
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**32**	2.0	mg/kg	EPA 6010b	
Cobalt	**14**	2.0	mg/kg	EPA 6010b	
Copper	**38**	1.0	mg/kg	EPA 6010b	
Nickel	**30**	2.0	mg/kg	EPA 6010b	
Vanadium	**75**	5.0	mg/kg	EPA 6010b	
Zinc	**160**	1.0	mg/kg	EPA 6010b	

Sample ID: B55-0.5-DUP **Laboratory ID:** T183454-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**9.3**	0.25	mg/kg	6020 ICP-MS	
Lead	**22**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B55-1.5-DUP **Laboratory ID:** T183454-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**13**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.2**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B55-2.5-DUP **Laboratory ID:** T183454-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B55-5.0-DUP **Laboratory ID:** T183454-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**32**	2.0	mg/kg	EPA 6010b	
Cobalt	**16**	2.0	mg/kg	EPA 6010b	
Copper	**30**	1.0	mg/kg	EPA 6010b	
Nickel	**26**	2.0	mg/kg	EPA 6010b	
Vanadium	**72**	5.0	mg/kg	EPA 6010b	
Zinc	**62**	1.0	mg/kg	EPA 6010b	

Sample ID: B56-0.5 **Laboratory ID:** T183454-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**8.3**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B56-1.5 **Laboratory ID:** T183454-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B56-2.5 **Laboratory ID:** T183454-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	0.25	mg/kg	6020 ICP-MS	
Lead	**6.9**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B56-5.0 **Laboratory ID:** T183454-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**36**	2.0	mg/kg	EPA 6010b	
Cobalt	**16**	2.0	mg/kg	EPA 6010b	
Copper	**35**	1.0	mg/kg	EPA 6010b	
Nickel	**36**	2.0	mg/kg	EPA 6010b	
Vanadium	**81**	5.0	mg/kg	EPA 6010b	
Zinc	**78**	1.0	mg/kg	EPA 6010b	

Sample ID: B20-0.5 **Laboratory ID:** T183454-21

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**62**	0.25	mg/kg	6020 ICP-MS	
Lead	**12**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B20-1.5 **Laboratory ID:** T183454-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.5**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B20-2.5 **Laboratory ID:** T183454-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B21-0.5 **Laboratory ID:** T183454-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	0.25	mg/kg	6020 ICP-MS	
Lead	**32**	0.25	mg/kg	6020 ICP-MS	

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Sample ID: B21-1.5 **Laboratory ID:** T183454-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B21-2.5 **Laboratory ID:** T183454-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**18**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.9**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B50-0.5 **Laboratory ID:** T183454-27

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	0.25	mg/kg	6020 ICP-MS	
Lead	**52**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B50-1.5 **Laboratory ID:** T183454-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**17**	0.25	mg/kg	6020 ICP-MS	
Lead	**11**	0.25	mg/kg	6020 ICP-MS	

Sample ID: B50-2.5 **Laboratory ID:** T183454-29

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	

Sample ID: EB-05 **Laboratory ID:** T183454-30

No Results Detected

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B60-0.5

T183454-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**14**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8112019	"	11/21/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*59.5 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*77.6 %*	*35-140*		"	"	"	"	

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B60-1.5

T183454-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**5.1**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*58.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*61.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B60-2.5

T183454-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.23	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**5.2**	0.23	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*66.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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B60-5.0

T183454-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	400	ug/kg	1	8112128	11/21/18	11/26/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*93.1 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112011	11/20/18	11/20/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*115 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112009	11/20/18	11/20/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**25**	5.0	"	"	"	"	"	"	
Barium	**100**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**33**	2.0	"	"	"	"	"	"	
Cobalt	**13**	2.0	"	"	"	"	"	"	
Copper	**29**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**19**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**69**	5.0	"	"	"	"	"	"	
Zinc	**61**	1.0	"	"	"	"	"	"	

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B60-5.0

T183454-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112010	11/20/18	11/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.1	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.2	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B60-5.0

T183454-04 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	4.1	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	
m,p-Xylene	ND	8.2	"	"	"	"	"	"	
o-Xylene	ND	4.1	"	"	"	"	"	"	

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B60-5.0

T183454-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.6 %*	*76.1-127*		*8112031*	*11/20/18*	*11/20/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*113 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B62-0.5

T183454-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**12**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**5.4**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8112019	"	11/21/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*65.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*71.0 %*	*35-140*		"	"	"	"	

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B62-1.5

T183454-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.0**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*62.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*59.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B62-2.5

T183454-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**6.9**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**3.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*64.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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B62-5.0

T183454-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	480	ug/kg	1	8112128	11/21/18	11/26/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*83.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112011	11/20/18	11/20/18	EPA 8015B	
C29-C40 (MORO)	**50**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*103 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112009	11/20/18	11/20/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**32**	2.0	"	"	"	"	"	"	
Cobalt	**13**	2.0	"	"	"	"	"	"	
Copper	**28**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**23**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**68**	5.0	"	"	"	"	"	"	
Zinc	**63**	1.0	"	"	"	"	"	"	

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T183454-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112010	11/20/18	11/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.7	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
Bromochloromethane	ND	5.7	"	"	"	"	"	"	
Bromodichloromethane	ND	5.7	"	"	"	"	"	"	
Bromoform	ND	5.7	"	"	"	"	"	"	
Bromomethane	ND	5.7	"	"	"	"	"	"	
n-Butylbenzene	ND	5.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.7	"	"	"	"	"	"	
Chlorobenzene	ND	5.7	"	"	"	"	"	"	
Chloroethane	ND	5.7	"	"	"	"	"	"	
Chloroform	ND	5.7	"	"	"	"	"	"	
Chloromethane	ND	5.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.7	"	"	"	"	"	"	
Dibromochloromethane	ND	5.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.7	"	"	"	"	"	"	
Dibromomethane	ND	5.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.7	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.7	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.7	"	"	"	"	"	"	

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T183454-08 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	5.7	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.7	"	"	"	"	"	"	
Isopropylbenzene	ND	5.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.7	"	"	"	"	"	"	
Methylene chloride	ND	5.7	"	"	"	"	"	"	
Naphthalene	ND	5.7	"	"	"	"	"	"	
n-Propylbenzene	ND	5.7	"	"	"	"	"	"	
Styrene	ND	5.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.7	"	"	"	"	"	"	
Tetrachloroethene	ND	5.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.7	"	"	"	"	"	"	
Trichloroethene	ND	5.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.7	"	"	"	"	"	"	
Vinyl chloride	ND	5.7	"	"	"	"	"	"	
Benzene	ND	5.7	"	"	"	"	"	"	
Toluene	ND	5.7	"	"	"	"	"	"	
Ethylbenzene	ND	5.7	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.7	"	"	"	"	"	"	

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B62-5.0

T183454-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*100 %*	*76.1-127*		*8112031*	*11/20/18*	*11/20/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*99.3 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*114 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B55-0.5

T183454-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**8.1**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**15**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*73.4 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*71.8 %*	*35-140*		*"*	*"*	*"*	*"*	

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B55-1.5

T183454-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**6.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*70.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*70.1 %*	*35-140*		*"*	*"*	*"*	*"*	

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B55-2.5

T183454-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**6.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68.1 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.4 %*	*35-140*		*"*	*"*	*"*	*"*	

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T183454-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	670	ug/kg	1	8112128	11/21/18	11/26/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*88.4 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112011	11/20/18	11/20/18	EPA 8015B	
C29-C40 (MORO)	**24**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*80.7 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112009	11/20/18	11/20/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**32**	2.0	"	"	"	"	"	"	
Cobalt	**14**	2.0	"	"	"	"	"	"	
Copper	**38**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**30**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**75**	5.0	"	"	"	"	"	"	
Zinc	**160**	1.0	"	"	"	"	"	"	

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B55-5.0

T183454-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112010	11/20/18	11/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	6.4	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
Bromochloromethane	ND	6.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.4	"	"	"	"	"	"	
Bromoform	ND	6.4	"	"	"	"	"	"	
Bromomethane	ND	6.4	"	"	"	"	"	"	
n-Butylbenzene	ND	6.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	6.4	"	"	"	"	"	"	
Chloroethane	ND	6.4	"	"	"	"	"	"	
Chloroform	ND	6.4	"	"	"	"	"	"	
Chloromethane	ND	6.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.4	"	"	"	"	"	"	
Dibromochloromethane	ND	6.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	13	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.4	"	"	"	"	"	"	
Dibromomethane	ND	6.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.4	"	"	"	"	"	"	

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B55-5.0

T183454-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	6.4	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	6.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	6.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	6.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.4	"	"	"	"	"	"	
Isopropylbenzene	ND	6.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.4	"	"	"	"	"	"	
Methylene chloride	ND	6.4	"	"	"	"	"	"	
Naphthalene	ND	6.4	"	"	"	"	"	"	
n-Propylbenzene	ND	6.4	"	"	"	"	"	"	
Styrene	ND	6.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.4	"	"	"	"	"	"	
Tetrachloroethene	ND	6.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	6.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.4	"	"	"	"	"	"	
Vinyl chloride	ND	6.4	"	"	"	"	"	"	
Benzene	ND	6.4	"	"	"	"	"	"	
Toluene	ND	6.4	"	"	"	"	"	"	
Ethylbenzene	ND	6.4	"	"	"	"	"	"	
m,p-Xylene	ND	13	"	"	"	"	"	"	
o-Xylene	ND	6.4	"	"	"	"	"	"	

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B55-5.0

T183454-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*96.1 %*	*76.1-127*		*8112031*	*11/20/18*	*11/20/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*114 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B55-0.5-DUP

T183454-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**9.3**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**22**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.2 %*	*35-140*		*"*	*"*	*"*	*"*	

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B55-1.5-DUP

T183454-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**13**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**6.2**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*71.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*73.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B55-2.5-DUP

T183454-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*73.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*74.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B55-5.0-DUP

T183454-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	560	ug/kg	1	8112128	11/21/18	11/26/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*82.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112011	11/20/18	11/20/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*105 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112009	11/20/18	11/20/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**32**	2.0	"	"	"	"	"	"	
Cobalt	**16**	2.0	"	"	"	"	"	"	
Copper	**30**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**26**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**72**	5.0	"	"	"	"	"	"	
Zinc	**62**	1.0	"	"	"	"	"	"	

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B55-5.0-DUP

T183454-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112010	11/20/18	11/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.8	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
Bromochloromethane	ND	5.8	"	"	"	"	"	"	
Bromodichloromethane	ND	5.8	"	"	"	"	"	"	
Bromoform	ND	5.8	"	"	"	"	"	"	
Bromomethane	ND	5.8	"	"	"	"	"	"	
n-Butylbenzene	ND	5.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.8	"	"	"	"	"	"	
Chlorobenzene	ND	5.8	"	"	"	"	"	"	
Chloroethane	ND	5.8	"	"	"	"	"	"	
Chloroform	ND	5.8	"	"	"	"	"	"	
Chloromethane	ND	5.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
Dibromochloromethane	ND	5.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.8	"	"	"	"	"	"	
Dibromomethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	

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B55-5.0-DUP

T183454-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.8	ug/kg	1	8112031	11/20/18	11/20/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.8	"	"	"	"	"	"	
Isopropylbenzene	ND	5.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.8	"	"	"	"	"	"	
Methylene chloride	ND	5.8	"	"	"	"	"	"	
Naphthalene	ND	5.8	"	"	"	"	"	"	
n-Propylbenzene	ND	5.8	"	"	"	"	"	"	
Styrene	ND	5.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
Tetrachloroethene	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.8	"	"	"	"	"	"	
Trichloroethene	ND	5.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
Vinyl chloride	ND	5.8	"	"	"	"	"	"	
Benzene	ND	5.8	"	"	"	"	"	"	
Toluene	ND	5.8	"	"	"	"	"	"	
Ethylbenzene	ND	5.8	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	5.8	"	"	"	"	"	"	

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B55-5.0-DUP

T183454-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.7 %*	*76.1-127*		*8112031*	*11/20/18*	*11/20/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*96.0 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*126 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B56-0.5

T183454-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**8.3**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*76.7 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B56-1.5

T183454-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*69.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*67.6 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B56-2.5

T183454-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**16**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**6.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*72.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*72.9 %*	*35-140*		*"*	*"*	*"*	*"*	

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B56-5.0

T183454-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	520	ug/kg	1	8112128	11/21/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*83.6 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112011	11/20/18	11/21/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*111 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112009	11/20/18	11/20/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**36**	2.0	"	"	"	"	"	"	
Cobalt	**16**	2.0	"	"	"	"	"	"	
Copper	**35**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**36**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**81**	5.0	"	"	"	"	"	"	
Zinc	**78**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B56-5.0

T183454-20 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112010	11/20/18	11/21/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	6.1	ug/kg	1	8112031	11/20/18	11/26/18	EPA 8260B/5035	
Bromochloromethane	ND	6.1	"	"	"	"	"	"	
Bromodichloromethane	ND	6.1	"	"	"	"	"	"	
Bromoform	ND	6.1	"	"	"	"	"	"	
Bromomethane	ND	6.1	"	"	"	"	"	"	
n-Butylbenzene	ND	6.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.1	"	"	"	"	"	"	
Chlorobenzene	ND	6.1	"	"	"	"	"	"	
Chloroethane	ND	6.1	"	"	"	"	"	"	
Chloroform	ND	6.1	"	"	"	"	"	"	
Chloromethane	ND	6.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
Dibromochloromethane	ND	6.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.1	"	"	"	"	"	"	
Dibromomethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	

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T183454-20 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloropropane	ND	6.1	ug/kg	1	8112031	11/20/18	11/26/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	6.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	6.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.1	"	"	"	"	"	"	
Isopropylbenzene	ND	6.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.1	"	"	"	"	"	"	
Methylene chloride	ND	6.1	"	"	"	"	"	"	
Naphthalene	ND	6.1	"	"	"	"	"	"	
n-Propylbenzene	ND	6.1	"	"	"	"	"	"	
Styrene	ND	6.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
Tetrachloroethene	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.1	"	"	"	"	"	"	
Trichloroethene	ND	6.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
Vinyl chloride	ND	6.1	"	"	"	"	"	"	
Benzene	ND	6.1	"	"	"	"	"	"	
Toluene	ND	6.1	"	"	"	"	"	"	
Ethylbenzene	ND	6.1	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	6.1	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B56-5.0

T183454-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*104 %*	*76.1-127*		*8112031*	*11/20/18*	*11/26/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*130 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B20-0.5

T183454-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**62**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**12**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8112019	"	11/21/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*66.1 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*70.3 %*		*35-140*	"	"	"	"	

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B20-1.5

T183454-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.5**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*67.9 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*68.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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B20-2.5

T183454-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**20**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112019	"	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*58.6 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*60.5 %*	*35-140*		*"*	*"*	*"*	*"*	

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B21-0.5

T183454-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**15**	0.25	mg/kg	1	8112020	11/20/18	11/21/18	6020 ICP-MS	
Lead	**32**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	50	ug/kg	10	8112019	"	11/21/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	50	"	"	"	"	"	"	R-07
beta-BHC	ND	50	"	"	"	"	"	"	R-07
delta-BHC	ND	50	"	"	"	"	"	"	R-07
Heptachlor	ND	50	"	"	"	"	"	"	R-07
Aldrin	ND	50	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	50	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	50	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	50	"	"	"	"	"	"	R-07
Endosulfan I	ND	50	"	"	"	"	"	"	R-07
4,4´-DDE	ND	50	"	"	"	"	"	"	R-07
Dieldrin	ND	50	"	"	"	"	"	"	R-07
Endrin	ND	50	"	"	"	"	"	"	R-07
4,4´-DDD	ND	50	"	"	"	"	"	"	R-07
Endosulfan II	ND	50	"	"	"	"	"	"	R-07
4,4´-DDT	ND	50	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	50	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	50	"	"	"	"	"	"	R-07
Methoxychlor	ND	50	"	"	"	"	"	"	R-07
Endrin ketone	ND	50	"	"	"	"	"	"	R-07
Toxaphene	ND	200	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*68.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*87.9 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B21-1.5

T183454-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8112026	11/20/18	11/21/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8112019	11/20/18	11/21/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*72.7 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*65.8 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B21-2.5

T183454-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**18**	0.25	mg/kg	1	8112026	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.9**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112022	11/20/18	11/22/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*64.2 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*65.2 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B50-0.5

T183454-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**14**	0.25	mg/kg	1	8112026	11/20/18	11/21/18	6020 ICP-MS	
Lead	**52**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	25	ug/kg	5	8112022	11/20/18	11/22/18	EPA 8081A	R-07
gamma-BHC (Lindane)	ND	25	"	"	"	"	"	"	R-07
beta-BHC	ND	25	"	"	"	"	"	"	R-07
delta-BHC	ND	25	"	"	"	"	"	"	R-07
Heptachlor	ND	25	"	"	"	"	"	"	R-07
Aldrin	ND	25	"	"	"	"	"	"	R-07
Heptachlor epoxide	ND	25	"	"	"	"	"	"	R-07
gamma-Chlordane	ND	25	"	"	"	"	"	"	R-07
alpha-Chlordane	ND	25	"	"	"	"	"	"	R-07
Endosulfan I	ND	25	"	"	"	"	"	"	R-07
4,4´-DDE	ND	25	"	"	"	"	"	"	R-07
Dieldrin	ND	25	"	"	"	"	"	"	R-07
Endrin	ND	25	"	"	"	"	"	"	R-07
4,4´-DDD	ND	25	"	"	"	"	"	"	R-07
Endosulfan II	ND	25	"	"	"	"	"	"	R-07
4,4´-DDT	ND	25	"	"	"	"	"	"	R-07
Endrin aldehyde	ND	25	"	"	"	"	"	"	R-07
Endosulfan sulfate	ND	25	"	"	"	"	"	"	R-07
Methoxychlor	ND	25	"	"	"	"	"	"	R-07
Endrin ketone	ND	25	"	"	"	"	"	"	R-07
Toxaphene	ND	100	"	"	"	"	"	"	R-07
Surrogate: Tetrachloro-meta-xylene		*60.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*61.6 %*	*35-140*		"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B50-1.5

T183454-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**17**	0.25	mg/kg	1	8112026	11/20/18	11/21/18	6020 ICP-MS	
Lead	**11**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112022	11/20/18	11/22/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*66.8 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*65.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

B50-2.5

T183454-29 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**19**	0.25	mg/kg	1	8112026	11/20/18	11/21/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112022	11/20/18	11/22/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*63.5 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*61.0 %*	*35-140*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

EB-05

T183454-30 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C9 (GRO)	ND	50	ug/l	1	8112130	11/21/18	11/21/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*98.2 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8112012	11/20/18	11/21/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*102 %*	*65-135*		"	"	"	"	
Metals by EPA 6020 Method									
Arsenic	ND	1.0	ug/l	1	8112014	11/20/18	11/21/18	6020 ICP-MS	
Lead	ND	2.0	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8112013	11/20/18	11/21/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

EB-05

T183454-30 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Organochlorine Pesticides by EPA Method 8081A									
Toxaphene	ND	20.0	ug/l	1	8112013	11/20/18	11/21/18	EPA 8081A	
Surrogate: Tetrachloro-meta-xylene		*51.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*67.5 %*	*35-140*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8112018	11/20/18	11/20/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

EB-05

T183454-30 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
trans-1,2-Dichloroethene	ND	1.0	ug/l	1	8112018	11/20/18	11/20/18	EPA 8260B	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

EB-05

T183454-30 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: 4-Bromofluorobenzene		*92.6 %*		*84.2-108*	*8112018*	*11/20/18*	*11/20/18*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*101 %*		*71.5-128*	*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*100 %*		*92.6-108*	*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112128 - EPA 5035 GC										
Blank (8112128-BLK1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*107*		*"*	*100*		*107*	*65-135*			
LCS (8112128-BS1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C4-C12 (GRO)	10900		ug/kg	11000		99.0	75-125			
Surrogate: 4-Bromofluorobenzene	*129*		*"*	*100*		*129*	*65-135*			
LCS Dup (8112128-BSD1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C4-C12 (GRO)	10700		ug/kg	10900		97.8	75-125	1.62	20	
Surrogate: 4-Bromofluorobenzene	*130*		*"*	*100*		*130*	*65-135*			
Batch 8112130 - EPA 5030 GC										
Blank (8112130-BLK1)				Prepared & Analyzed: 11/21/18						
C6-C9 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*83.6*		*"*	*100*		*83.6*	*65-135*			
LCS (8112130-BS1)				Prepared & Analyzed: 11/21/18						
C4-C12 (GRO)	5010	50	ug/l	5500		91.0	75-125			
Surrogate: 4-Bromofluorobenzene	*108*		*"*	*100*		*108*	*65-135*			
LCS Dup (8112130-BSD1)				Prepared & Analyzed: 11/21/18						
C4-C12 (GRO)	5680	50	ug/l	5500		103	75-125	12.6	20	
Surrogate: 4-Bromofluorobenzene	*102*		*"*	*100*		*102*	*65-135*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112011 - EPA 3550B GC										
Blank (8112011-BLK1)				Prepared & Analyzed: 11/20/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*119*		*"*	*101*		*118*	*65-135*			
LCS (8112011-BS1)				Prepared & Analyzed: 11/20/18						
C13-C28 (DRO)	510	10	mg/kg	505		101	75-125			
Surrogate: p-Terphenyl	*107*		*"*	*101*		*106*	*65-135*			
LCS Dup (8112011-BSD1)				Prepared & Analyzed: 11/20/18						
C13-C28 (DRO)	550	10	mg/kg	505		109	75-125	7.95	20	
Surrogate: p-Terphenyl	*118*		*"*	*101*		*117*	*65-135*			
Batch 8112012 - EPA 3510C GC										
Blank (8112012-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*4.08*		*"*	*4.00*		*102*	*65-135*			
LCS (8112012-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
C13-C28 (DRO)	18.0	0.50	mg/l	20.0		90.0	75-125			
Surrogate: p-Terphenyl	*3.92*		*"*	*4.00*		*98.1*	*65-135*			
Matrix Spike (8112012-MS1)		**Source: T183454-30**		Prepared: 11/20/18 Analyzed: 11/21/18						
C13-C28 (DRO)	19.4	0.50	mg/l	20.0	ND	97.0	75-125			
Surrogate: p-Terphenyl	*4.23*		*"*	*4.00*		*106*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112012 - EPA 3510C GC										
Matrix Spike Dup (8112012-MSD1)		**Source: T183454-30**		Prepared: 11/20/18 Analyzed: 11/21/18						
C13-C28 (DRO)	20.3	0.50	mg/l	20.0	ND	102	75-125	4.58	20	
Surrogate: p-Terphenyl	*4.27*		*"*	*4.00*		*107*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112009 - EPA 3050B										
Blank (8112009-BLK1)				Prepared & Analyzed: 11/20/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8112009-BS1)				Prepared & Analyzed: 11/20/18						
Arsenic	94.3	5.0	mg/kg	100		94.3	75-125			
Barium	86.0	1.0	"	100		86.0	75-125			
Cadmium	86.0	2.0	"	100		86.0	75-125			
Chromium	86.9	2.0	"	100		86.9	75-125			
Lead	92.5	3.0	"	100		92.5	75-125			
Matrix Spike (8112009-MS1)		**Source: T183453-01**		Prepared & Analyzed: 11/20/18						
Arsenic	111	5.0	mg/kg	100	ND	111	75-125			
Barium	211	1.0	"	100	92.5	118	75-125			
Cadmium	101	2.0	"	100	ND	101	75-125			
Chromium	118	2.0	"	100	14.6	104	75-125			
Lead	117	3.0	"	100	ND	117	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112009 - EPA 3050B										
Matrix Spike Dup (8112009-MSD1)		**Source: T183453-01**		Prepared & Analyzed: 11/20/18						
Arsenic	103	5.0	mg/kg	100	ND	103	75-125	7.84	20	
Barium	185	1.0	"	100	92.5	92.6	75-125	13.0	20	
Cadmium	90.7	2.0	"	100	ND	90.7	75-125	10.7	20	
Chromium	105	2.0	"	100	14.6	89.9	75-125	12.4	20	
Lead	105	3.0	"	100	ND	105	75-125	10.6	20	

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112014 - EPA 3010A										
Blank (8112014-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	ND	1.0	ug/l							
Lead	ND	2.0	"							
LCS (8112014-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	48.4	1.0	ug/l	50.0		96.7	80-120			
Lead	51.2	2.0	"	50.0		102	80-120			
Matrix Spike (8112014-MS1)		**Source: T183454-30**		Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	49.1	1.0	ug/l	50.0	ND	98.3	75-125			
Lead	50.6	2.0	"	50.0	ND	101	75-125			
Matrix Spike Dup (8112014-MSD1)		**Source: T183454-30**		Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	45.8	1.0	ug/l	50.0	ND	91.5	75-125	7.08	20	
Lead	47.8	2.0	"	50.0	ND	95.6	75-125	5.70	20	
Batch 8112020 - EPA 3050B										
Blank (8112020-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8112020-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	27.8	0.25	mg/kg	25.0		111	80-120			
Lead	29.2	0.25	"	25.0		117	80-120			
Duplicate (8112020-DUP1)		**Source: T183454-01**		Prepared: 11/20/18 Analyzed: 11/21/18						
Arsenic	16.0	1.2	mg/kg		15.9			0.989	20	

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112020 - EPA 3050B										
Matrix Spike (8112020-MS1)		**Source: T183454-01**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	38.4	0.25	mg/kg	25.0	15.9	90.2	75-125			
Lead	63.6	0.25	"	25.0	13.8	199	75-125			QM-PS
Matrix Spike (8112020-MS2)		**Source: T183454-02**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	42.9	0.25	mg/kg	25.0	16.2	107	75-125			
Lead	34.3	0.25	"	25.0	5.13	117	75-125			
Matrix Spike Dup (8112020-MSD1)		**Source: T183454-01**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	41.5	0.25	mg/kg	25.0	15.9	103	75-125	7.81	20	
Lead	45.5	0.25	"	25.0	13.8	127	75-125	33.2	20	QM-PS
Post Spike (8112020-PS1)		**Source: T183454-01**		Prepared: 11/20/18	Analyzed: 11/21/18					
Lead	38.7		mg/kg	25.0	13.8	99.6	80-120			
Batch 8112026 - EPA 3050B										
Blank (8112026-BLK1)				Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	ND	0.25	mg/kg							
Lead	ND	0.25	"							
LCS (8112026-BS1)				Prepared: 11/20/18	Analyzed: 11/28/18					
Arsenic	23.0	0.25	mg/kg	25.0		92.0	80-120			
Lead	23.3	0.25	"	25.0		93.0	80-120			
Duplicate (8112026-DUP1)		**Source: T183454-25**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	22.8	1.2	mg/kg		19.4			16.1	20	

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112026 - EPA 3050B										
Matrix Spike (8112026-MS1)		**Source: T183454-25**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	42.0	0.25	mg/kg	24.3	19.4	93.2	75-125			
Lead	42.4	0.25	"	24.3	11.1	129	75-125			QR-04
Matrix Spike Dup (8112026-MSD1)		**Source: T183454-25**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	38.3	0.25	mg/kg	23.4	19.4	81.1	75-125	9.17	20	
Lead	34.8	0.25	"	23.4	11.1	102	75-125	19.5	20	
Post Spike (8112026-PS1)		**Source: T183454-25**		Prepared: 11/20/18	Analyzed: 11/21/18					
Arsenic	43.1		mg/kg	25.0	19.4	95.1	80-120			
Lead	34.1		"	25.0	11.1	92.1	80-120			

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112010 - EPA 7471A Soil										
Blank (8112010-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Mercury	ND	0.10	mg/kg							
LCS (8112010-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Mercury	0.410	0.10	mg/kg	0.417		98.4	80-120			
Matrix Spike (8112010-MS1)		**Source: T183453-01**		Prepared: 11/20/18 Analyzed: 11/21/18						
Mercury	0.383	0.10	mg/kg	0.417	ND	91.9	75-125			
Matrix Spike Dup (8112010-MSD1)		**Source: T183453-01**		Prepared: 11/20/18 Analyzed: 11/21/18						
Mercury	0.386	0.10	mg/kg	0.417	ND	92.7	75-125	0.911	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112013 - EPA 3510C GCMS/ECD										
Blank (8112013-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*59.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.691*		*"*	*1.00*		*69.1*	*35-140*			
LCS (8112013-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	3.40	1.00	ug/l	4.00		84.9	40-120			
Heptachlor	3.74	1.00	"	4.00		93.5	40-120			
Aldrin	3.28	1.00	"	4.00		82.0	40-120			
Dieldrin	3.37	1.00	"	4.00		84.2	40-120			
Endrin	3.66	1.00	"	4.00		91.6	40-120			
4,4´-DDT	4.22	2.00	"	4.00		106	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.733*		*"*	*1.00*		*73.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.732*		*"*	*1.00*		*73.2*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112013 - EPA 3510C GCMS/ECD										
Matrix Spike (8112013-MS1)		**Source: T183454-30**		Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	3.29	1.00	ug/l	4.00	ND	82.3	20-120			
Heptachlor	3.55	1.00	"	4.00	ND	88.7	20-120			
Aldrin	1.61	1.00	"	4.00	ND	40.4	20-120			
Dieldrin	3.35	1.00	"	4.00	ND	83.7	20-120			
Endrin	3.54	1.00	"	4.00	ND	88.4	20-120			
4,4´-DDT	4.17	2.00	"	4.00	ND	104	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.559*		*"*	*1.00*		*55.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.718*		*"*	*1.00*		*71.8*	*35-140*			
Matrix Spike Dup (8112013-MSD1)		**Source: T183454-30**		Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	3.23	1.00	ug/l	4.00	ND	80.9	20-120	1.71	30	
Heptachlor	3.50	1.00	"	4.00	ND	87.4	20-120	1.46	30	
Aldrin	2.51	1.00	"	4.00	ND	62.9	20-120	43.6	30	QR-04
Dieldrin	3.36	1.00	"	4.00	ND	84.0	20-120	0.357	30	
Endrin	3.53	1.00	"	4.00	ND	88.2	20-120	0.221	30	
4,4´-DDT	4.14	2.00	"	4.00	ND	103	20-120	0.748	30	
Surrogate: Tetrachloro-meta-xylene	*0.589*		*"*	*1.00*		*58.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.704*		*"*	*1.00*		*70.4*	*35-140*			
Batch 8112019 - EPA 3550 ECD/GCMS										
Blank (8112019-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112019 - EPA 3550 ECD/GCMS										
Blank (8112019-BLK1)				Prepared: 11/20/18 Analyzed: 11/21/18						
Endosulfan II	ND	5.0	ug/kg							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.77*		*"*	*10.1*		*76.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.98*		*"*	*10.1*		*69.1*	*35-140*			
LCS (8112019-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	31.7	5.0	ug/kg	40.4		78.6	40-120			
Heptachlor	32.8	5.0	"	40.4		81.2	40-120			
Aldrin	30.6	5.0	"	40.4		75.7	40-120			
Dieldrin	29.4	5.0	"	40.4		72.7	40-120			
Endrin	30.7	5.0	"	40.4		76.1	40-120			
4,4´-DDT	30.3	5.0	"	40.4		75.1	33-147			
Surrogate: Tetrachloro-meta-xylene	*7.34*		*"*	*10.1*		*72.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.42*		*"*	*10.1*		*63.6*	*35-140*			
Matrix Spike (8112019-MS1)		**Source: T183454-01**		Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	29.3	50	ug/kg	40.4	ND	72.5	30-120			
Heptachlor	32.1	50	"	40.4	ND	79.4	30-120			
Aldrin	28.7	50	"	40.4	ND	71.0	30-120			
Dieldrin	27.6	50	"	40.4	ND	68.4	30-120			
Endrin	29.2	50	"	40.4	ND	72.3	30-120			
4,4´-DDT	29.5	50	"	40.4	ND	73.0	30-120			
Surrogate: Tetrachloro-meta-xylene	*7.42*		*"*	*10.1*		*73.4*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.25*		*"*	*10.1*		*71.8*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112019 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (8112019-MSD1)		**Source: T183454-01**		Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	32.1	50	ug/kg	40.4	ND	79.5	30-120	9.24	30	
Heptachlor	37.4	50	"	40.4	ND	92.5	30-120	15.2	30	
Aldrin	32.0	50	"	40.4	ND	79.2	30-120	10.9	30	
Dieldrin	32.0	50	"	40.4	ND	79.1	30-120	14.5	30	
Endrin	33.7	50	"	40.4	ND	83.4	30-120	14.2	30	
4,4´-DDT	35.9	50	"	40.4	ND	88.9	30-120	19.7	30	
Surrogate: Tetrachloro-meta-xylene	*9.97*		*"*	*10.1*		*98.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*9.23*		*"*	*10.1*		*91.4*	*35-140*			
Batch 8112022 - EPA 3550 ECD/GCMS										
Blank (8112022-BLK1)				Prepared: 11/20/18 Analyzed: 11/22/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.38*		*"*	*10.1*		*73.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.24*		*"*	*10.1*		*71.7*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112022 - EPA 3550 ECD/GCMS										
LCS (8112022-BS1)				Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	33.0	5.0	ug/kg	40.4		81.6	40-120			
Heptachlor	34.7	5.0	"	40.4		85.8	40-120			
Aldrin	31.1	5.0	"	40.4		77.1	40-120			
Dieldrin	32.7	5.0	"	40.4		81.0	40-120			
Endrin	33.0	5.0	"	40.4		81.8	40-120			
4,4´-DDT	31.2	5.0	"	40.4		77.1	33-147			
Surrogate: Tetrachloro-meta-xylene	*6.66*		*"*	*10.1*		*66.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*7.07*		*"*	*10.1*		*70.0*	*35-140*			
Matrix Spike (8112022-MS1)		**Source: T183454-26**		Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	33.9	5.0	ug/kg	39.2	ND	86.4	30-120			
Heptachlor	35.5	5.0	"	39.2	ND	90.5	30-120			
Aldrin	32.2	5.0	"	39.2	ND	82.2	30-120			
Dieldrin	33.0	5.0	"	39.2	ND	84.1	30-120			
Endrin	33.7	5.0	"	39.2	ND	86.1	30-120			
4,4´-DDT	35.6	5.0	"	39.2	ND	90.7	30-120			
Surrogate: Tetrachloro-meta-xylene	*6.29*		*"*	*9.80*		*64.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.68*		*"*	*9.80*		*68.2*	*35-140*			
Matrix Spike Dup (8112022-MSD1)		**Source: T183454-26**		Prepared: 11/20/18 Analyzed: 11/21/18						
gamma-BHC (Lindane)	33.3	5.0	ug/kg	40.4	ND	82.3	30-120	4.85	30	
Heptachlor	34.6	5.0	"	40.4	ND	85.5	30-120	5.64	30	
Aldrin	30.8	5.0	"	40.4	ND	76.1	30-120	7.68	30	
Dieldrin	31.5	5.0	"	40.4	ND	78.0	30-120	7.55	30	
Endrin	32.3	5.0	"	40.4	ND	79.8	30-120	7.48	30	
4,4´-DDT	34.1	5.0	"	40.4	ND	84.3	30-120	7.36	30	
Surrogate: Tetrachloro-meta-xylene	*5.75*		*"*	*10.1*		*56.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*5.81*		*"*	*10.1*		*57.5*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112018 - EPA 5030 GCMS										
Blank (8112018-BLK1)				Prepared & Analyzed: 11/20/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112018 - EPA 5030 GCMS										
Blank (8112018-BLK1)				Prepared & Analyzed: 11/20/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*18.5*		*"*	*20.0*		*92.4*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.6*		*"*	*20.0*		*103*	*71.5-128*			
Surrogate: Toluene-d8	*19.9*		*"*	*20.0*		*99.6*	*92.6-108*			
LCS (8112018-BS1)				Prepared & Analyzed: 11/20/18						
Chlorobenzene	18.5	1.0	ug/l	20.0		92.6	79.3-117			
1,1-Dichloroethene	17.0	1.0	"	20.0		85.1	68.3-130			
Trichloroethene	17.6	1.0	"	20.0		88.0	73.1-108			
Benzene	17.8	0.50	"	20.0		88.9	79.9-118			
Toluene	17.5	0.50	"	20.0		87.6	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.1*		*"*	*20.0*		*95.6*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.3*		*"*	*20.0*		*101*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*100*	*92.6-108*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112018 - EPA 5030 GCMS										
LCS Dup (8112018-BSD1)				Prepared & Analyzed: 11/20/18						
Chlorobenzene	19.6	1.0	ug/l	20.0		98.2	79.3-117	5.82	20	
1,1-Dichloroethene	17.9	1.0	"	20.0		89.6	68.3-130	5.15	20	
Trichloroethene	19.1	1.0	"	20.0		95.4	73.1-108	8.13	20	
Benzene	18.8	0.50	"	20.0		93.8	79.9-118	5.31	20	
Toluene	18.6	0.50	"	20.0		93.0	78.7-116	6.09	20	
Surrogate: 4-Bromofluorobenzene	*19.4*		*"*	*20.0*		*97.0*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.3*		*"*	*20.0*		*101*	*71.5-128*			
Surrogate: Toluene-d8	*20.1*		*"*	*20.0*		*100*	*92.6-108*			
Batch 8112031 - EPA 5035 GCMS										
Blank (8112031-BLK1)				Prepared & Analyzed: 11/20/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112031 - EPA 5035 GCMS										
Blank (8112031-BLK1)				Prepared & Analyzed: 11/20/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112031 - EPA 5035 GCMS										
Blank (8112031-BLK1)				Prepared & Analyzed: 11/20/18						
Surrogate: Toluene-d8	*40.3*		*ug/kg*	*39.8*		*101*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.4*		*"*	*39.8*		*102*	*85.9-114*			
Surrogate: Dibromofluoromethane	*41.7*		*"*	*39.8*		*105*	*77.8-142*			
LCS (8112031-BS1)				Prepared & Analyzed: 11/20/18						
Chlorobenzene	37.8	5.0	ug/kg	40.0		94.6	75-125			
1,1-Dichloroethene	36.0	5.0	"	40.0		90.1	75-125			
Trichloroethene	37.4	5.0	"	40.0		93.4	75-125			
Benzene	37.5	5.0	"	40.0		93.7	75-125			
Toluene	37.1	5.0	"	40.0		92.8	75-125			
Surrogate: Toluene-d8	*39.6*		*"*	*40.0*		*99.0*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*41.7*		*"*	*40.0*		*104*	*85.9-114*			
Surrogate: Dibromofluoromethane	*43.9*		*"*	*40.0*		*110*	*77.8-142*			
LCS Dup (8112031-BSD1)				Prepared & Analyzed: 11/20/18						
Chlorobenzene	35.9	5.0	ug/kg	39.6		90.6	75-125	5.26	20	
1,1-Dichloroethene	35.4	5.0	"	39.6		89.4	75-125	1.77	20	
Trichloroethene	36.2	5.0	"	39.6		91.4	75-125	3.21	20	
Benzene	36.8	5.0	"	39.6		92.9	75-125	1.85	20	
Toluene	35.7	5.0	"	39.6		90.2	75-125	3.95	20	
Surrogate: Toluene-d8	*38.7*		*"*	*39.6*		*97.7*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*41.1*		*"*	*39.6*		*104*	*85.9-114*			
Surrogate: Dibromofluoromethane	*42.8*		*"*	*39.6*		*108*	*77.8-142*			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	11/30/18 09:54

Notes and Definitions

R-07	Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.
QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-PS	The percent recovery and/or RPD are outside acceptance criteria. Results accepted based upon percent recovery results in the post spike and/or serial dilution.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18401 Von Karman Ave #410
Phone: 949-377-2227 Fax:
Project Manager: Clive Steadman

Date: 11.19.18 Page: 1 Of 3
Project Name: Hamilton HS
Collector: Wes Skillings Client Project #: 5030.008.003
Batch #: T183454 EDF #:

	Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel) & MO	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals + PB & Ar only	8081 OCP's	~~8082 PCB's~~ NS 11.19.18			Comments/Preservative	Total # of containers
	01	B60-0.5	11/19/18	0801	Soil	4oz										X	X					1
	02	B60-1.5	"	0802		4oz										X	X					1
	03	B60-2.5	"	0804		4oz										X	X					1
	04	B60-5.0	"	0830		4oz							X		X							1
	05	OM B60-5.0	"	0830		5 von	X					X						X				5
05	06	B62-0.5	"	0845		4oz										X	X					1
06	07	B62-1.5	"	0847		4oz										X	X					1
07	08	B62-2.5	"	0849		4oz										X	X					1
08	09	B62-5.0	"	0855		4oz							X		X							1
	10	B62-5.0	"	0855		5 von	X					X						X				5
09	11	B55-0.5	"	0955		1										X	X					1
10	12	B55-1.5	"	0957		1										X	X					1
11	13	B55-2.5	"	0959		1										X	X					1
12	14	B55-5.0	"	1005		1							X		X							1
	15	B55-5.0	"	1005		5 von	X					X						X				5

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	11.19.18 1637	[signature]	11-19-18 / 16:37
[signature]	11-19-18 / 17:25	[signature]	11-19-18 17:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 6.3

Turn around time:

Notes
Produce EDD in ~~Esdat~~ regular Format
Analyze TPH-G20 + TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 180284

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 18901 Von Karman Ave #400
Phone: 949-377-2221 Fax:
Project Manager: Clare Stoodman

Date: 11.19.18 Page: 2 Of 3
Project Name: Hamilton HS
Collector: Wes S Client Project #: S030.008.003
Batch #: T183454 EDF #:

	Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals PB + Arsenic	8081 OCP's	~~8082 PCB's~~ WS 11.19.18			Comments/Preservative	Total # of containers
13	~~16~~	B55-0.5-DUP	11.19.18	0956	Soil	4oz										X	X					1
14	~~17~~	B55-1.5-DUP		0958		4oz										X	X					1
15	~~18~~	B55-2.5-DUP		1000		4oz										X	X					1
16	~~19~~	B55-5.0-DUP		1006		4oz							X		X							1
	~~20~~	B55-5.0-DUP		1006		5 vom	X					X						X				5
17	~~21~~	B56-0.5		1030		4oz										X	X					1
18	~~22~~	B56-1.5		1032		4oz										X	X					1
19	~~23~~	B56-2.5		1034		4oz										X	X					1
20	~~24~~	B56-5.0		1040		4oz	X					X	X		X			X				1
	~~25~~	B56-5.0		1040		5vom	X					X	X		X							5
21	~~26~~	B20-0.5		1120		4oz										X	X					1
22	~~27~~	B20-1.5		1132		4oz										X	X					1
23	~~28~~	B20-2.5		1134		4oz										X	X					1
24	~~29~~	B21-0.5		1145		4oz										X	X					1
25	~~30~~	B21-1.5		1147		4oz										X	X					1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	11.19.18 1637	[signature]	11-19-18 16:37
[signature]	11-19-18 17:25	[signature]	11-19-18 17:25

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 6.3

Turn around time:

Notes
Produce EDD in ~~Estat~~ regular format
Analyze TPH - 020 + TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 180282

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terraphase Engineering Inc
Address: 19901 Von Karman Ave # 410
Phone: 949 377 2227 Fax:
Project Manager: Clare Steedman

Date: 11.19.18 Page: 3 Of 3
Project Name: Hamilton HS
Collector: Wes S Client Project #: 5030.004.003
Batch #: T183454 EDF #:

	Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals DB + Ar Only	8051 OC Pes	WS 11.19.18			Comments/Preservative	Total # of containers
26	31	B20 - 2.5	11.19.18	1149	Soil	4oz										X	X					1
27	32	B50 - 0.5	↓	1200	↓	↓										X	X					1
28	33	B50 - 1.5	↓	1202	↓	↓										X	X					1
29	34	B50 - 2.5	↓	1204	↓	↓										X	X					1
30	35	EB-05	↓	1250	water	lamber											X					1
	36	EB-05	↓	1250	water	1250 Poly										X						1
	37	EB-05	↓	1250	water	60mm	X					X	X									6

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	11.19.18 1637		11-19-18 / 16:37
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	11-19-18 / 17:25		11-19-18 17:25
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 6.3

Turn around time:

Notes
Produce EDD in ~~Excel~~ Regular Format
Analyze TPH - GRO + TPH DRO/ORO

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

COC 180283

SunStar Laboratories

Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T183454

Client Name: Terraphase Engineering, Inc. Project: Hamilton HS

Delivered by: ☐ **Client** ☒ **SunStar Courier** ☐ **GSO** ☐ **FedEx** ☐ **Other**

If Courier, Received by: Mitchell Date/Time Courier Received: 11-19-18 16:34

Lab Received by: Sunny Date/Time Lab Received: 11-19-18 17:25

Total number of coolers received: 0

Temperature:	Cooler #1	5.1	°C +/- the CF (1.2°C) =	6.3	°C	corrected temperature
Temperature:	Cooler #2		°C +/- the CF (1.2°C) =		°C	corrected temperature
Temperature:	Cooler #3		°C +/- the CF (1.2°C) =		°C	corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? ☐**Yes** ☒**No**

If NO:

Samples received on ice? ☒Yes ☐**No → Complete Non-Conformance Sheet**

If on ice, samples received same day collected? ☒Yes → Acceptable ☐**No → Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample	☐Yes	☐No*	☒N/A
Sample containers intact	☒Yes	☐No*	
Sample labels match Chain of Custody IDs	☐Yes	☒No*	
Total number of containers received match COC	☒Yes	☐No*	
Proper containers received for analyses requested on COC	☒Yes	☐No*	
Proper preservative indicated on COC/containers for analyses requested	☒Yes	☐No*	☐N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☐ **Yes**	☒**No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: DM 11-20-18

Comments:

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SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # _____T183454_____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☒ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments:

5035 VOAs for sample 04 on COC (B60-5.0) are marked as SV60-5.0. Sample 19 on COC (B56-2.5) is marked as B56-5.0, received two jars marked as this and labeled by matching the times.

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

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SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/20/2018 9:16:43AM

WORK ORDER

T183454

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Mike Jaroudi**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	11/30/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	11/20/18 17:25
Logged In By:	Dan Marteski	Date Logged In:	11/20/18 07:33

Samples Received at:	**6.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	Yes		

Analysis	Due	TAT	Expires	Comments
T183454-01 B60-0.5 [Soil] Sampled 11/19/18 08:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 08:00	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 08:00	
T183454-02 B60-1.5 [Soil] Sampled 11/19/18 08:02 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 08:02	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 08:02	
T183454-03 B60-2.5 [Soil] Sampled 11/19/18 08:04 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 08:04	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 08:04	
T183454-04 B60-5.0 [Soil] Sampled 11/19/18 08:30 (GMT-08:00) Pacific Time (US &				
6010 Title 22	11/30/18 15:00	5	05/18/19 08:30	
8015 CC (D/MO)	11/30/18 15:00	5	12/03/18 08:30	
8015 m 5035-GRO	11/30/18 15:00	5	12/03/18 08:30	
8260 5035	11/30/18 15:00	5	12/03/18 08:30	
T183454-05 B62-0.5 [Soil] Sampled 11/19/18 08:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 08:45	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 08:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183454

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183454-06 B62-1.5 [Soil] Sampled 11/19/18 08:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 08:47	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 08:47	
T183454-07 B62-2.5 [Soil] Sampled 11/19/18 08:49 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 08:49	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 08:49	
T183454-08 B62-5.0 [Soil] Sampled 11/19/18 08:55 (GMT-08:00) Pacific Time (US &				
6010 Title 22	11/30/18 15:00	5	05/18/19 08:55	
8015 CC (D/MO)	11/30/18 15:00	5	12/03/18 08:55	
8015 m 5035-GRO	11/30/18 15:00	5	12/03/18 08:55	
8260 5035	11/30/18 15:00	5	12/03/18 08:55	
T183454-09 B55-0.5 [Soil] Sampled 11/19/18 09:55 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 09:55	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 09:55	
T183454-10 B55-1.5 [Soil] Sampled 11/19/18 09:57 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 09:57	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 09:57	
T183454-11 B55-2.5 [Soil] Sampled 11/19/18 09:59 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 09:59	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 09:59	
T183454-12 B55-5.0 [Soil] Sampled 11/19/18 10:05 (GMT-08:00) Pacific Time (US &				
6010 Title 22	11/30/18 15:00	5	05/18/19 10:05	
8015 CC (D/MO)	11/30/18 15:00	5	12/03/18 10:05	
8015 m 5035-GRO	11/30/18 15:00	5	12/03/18 10:05	
8260 5035	11/30/18 15:00	5	12/03/18 10:05	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183454

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183454-13 B55-0.5-DUP [Soil] Sampled 11/19/18 09:56 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 09:56	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 09:56	
T183454-14 B55-1.5-DUP [Soil] Sampled 11/19/18 09:58 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 09:58	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 09:58	
T183454-15 B55-2.5-DUP [Soil] Sampled 11/19/18 10:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 10:00	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 10:00	
T183454-16 B55-5.0-DUP [Soil] Sampled 11/19/18 10:06 (GMT-08:00) Pacific Time (US &				
6010 Title 22	11/30/18 15:00	5	05/18/19 10:06	
8015 CC (D/MO)	11/30/18 15:00	5	12/03/18 10:06	
8015 m 5035-GRO	11/30/18 15:00	5	12/03/18 10:06	
8260 5035	11/30/18 15:00	5	12/03/18 10:06	
T183454-17 B56-0.5 [Soil] Sampled 11/19/18 10:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 10:30	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 10:30	
T183454-18 B56-1.5 [Soil] Sampled 11/19/18 10:32 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 10:32	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 10:32	
T183454-19 B56-2.5 [Soil] Sampled 11/19/18 10:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 10:34	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 10:34	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183454

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183454-20 B56-5.0 [Soil] Sampled 11/19/18 10:40 (GMT-08:00) Pacific Time (US &				
6010 Title 22	11/30/18 15:00	5	05/18/19 10:40	
8015 CC (D/MO)	11/30/18 15:00	5	12/03/18 10:40	
8015 m 5035-GRO	11/30/18 15:00	5	12/03/18 10:40	
8260 5035	11/30/18 15:00	5	12/03/18 10:40	
T183454-21 B20-0.5 [Soil] Sampled 11/19/18 11:30 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 11:30	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 11:30	
T183454-22 B20-1.5 [Soil] Sampled 11/19/18 11:32 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 11:32	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 11:32	
T183454-23 B20-2.5 [Soil] Sampled 11/19/18 11:34 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 11:34	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 11:34	
T183454-24 B21-0.5 [Soil] Sampled 11/19/18 11:45 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 11:45	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 11:45	
T183454-25 B21-1.5 [Soil] Sampled 11/19/18 11:47 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 11:47	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 11:47	
T183454-26 B21-2.5 [Soil] Sampled 11/19/18 11:49 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 11:49	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 11:49	
T183454-27 B50-0.5 [Soil] Sampled 11/19/18 12:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 12:00	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 12:00	

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WORK ORDER

T183454

Client: **Terraphase Engineering - Irvine** **Project Manager:** **Mike Jaroudi**
Project: **Hamilton Highschool** **Project Number:** **5030.008.003**

Analysis	Due	TAT	Expires	Comments
T183454-28 B50-1.5 [Soil] Sampled 11/19/18 12:02 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 12:02	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 12:02	
T183454-29 B50-2.5 [Soil] Sampled 11/19/18 12:04 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	03/19/19 12:04	As and Pb only
8081 Pesticides	11/30/18 15:00	5	12/03/18 12:04	
T183454-30 EB-05 [Water] Sampled 11/19/18 12:50 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	11/30/18 15:00	5	05/18/19 12:50	As and Pb only
8015 CC (D/MO)	11/30/18 15:00	5	12/03/18 12:50	
8015B Gas Purge	11/30/18 15:00	5	12/03/18 12:50	
8081 Pesticides	11/30/18 15:00	5	11/26/18 12:50	
8260	11/30/18 15:00	5	12/03/18 12:50	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By Date

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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03 December 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 11/21/18 16:38. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV64-5.0 (17)	T183494-01	Soil	11/21/18 00:00	11/21/18 16:38
SV64-10.0 (22)	T183494-02	Soil	11/21/18 00:00	11/21/18 16:38
SV64-15.0 (27)	T183494-03	Soil	11/21/18 00:00	11/21/18 16:38
SV56-10.0	T183494-04	Soil	11/21/18 00:00	11/21/18 16:38
SV56-15.0	T183494-05	Soil	11/21/18 00:00	11/21/18 16:38
SV55-10.0	T183494-06	Soil	11/21/18 00:00	11/21/18 16:38
SV55-15.0	T183494-07	Soil	11/21/18 00:00	11/21/18 16:38
SV60-10.0	T183494-08	Soil	11/21/18 00:00	11/21/18 16:38
SV60-15.0	T183494-09	Soil	11/21/18 00:00	11/21/18 16:38
SV62-10.0	T183494-10	Soil	11/21/18 00:00	11/21/18 16:38
SV62-15.0	T183494-11	Soil	11/21/18 00:00	11/21/18 16:38
B70-0.5	T183494-12	Soil	11/21/18 00:00	11/21/18 16:38
B70-1.5	T183494-13	Soil	11/21/18 00:00	11/21/18 16:38
EB-06	T183494-14	Water	11/21/18 00:00	11/21/18 16:38

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

DETECTIONS SUMMARY

Sample ID: SV64-5.0 (17) **Laboratory ID:** T183494-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**14**	5.0	mg/kg	EPA 6010b	
Barium	**84**	1.0	mg/kg	EPA 6010b	
Chromium	**39**	2.0	mg/kg	EPA 6010b	
Cobalt	**8.6**	2.0	mg/kg	EPA 6010b	
Copper	**25**	1.0	mg/kg	EPA 6010b	
Nickel	**23**	2.0	mg/kg	EPA 6010b	
Vanadium	**55**	5.0	mg/kg	EPA 6010b	
Zinc	**49**	1.0	mg/kg	EPA 6010b	
Toluene	**9.1**	4.2	ug/kg	EPA 8260B/5035	

Sample ID: SV64-10.0 (22) **Laboratory ID:** T183494-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	5.0	mg/kg	EPA 6010b	
Barium	**76**	1.0	mg/kg	EPA 6010b	
Chromium	**32**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.5**	2.0	mg/kg	EPA 6010b	
Copper	**22**	1.0	mg/kg	EPA 6010b	
Nickel	**23**	2.0	mg/kg	EPA 6010b	
Vanadium	**51**	5.0	mg/kg	EPA 6010b	
Zinc	**50**	1.0	mg/kg	EPA 6010b	

Sample ID: SV64-15.0 (27) **Laboratory ID:** T183494-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**50**	1.0	mg/kg	EPA 6010b	
Chromium	**19**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.2**	2.0	mg/kg	EPA 6010b	
Copper	**10**	1.0	mg/kg	EPA 6010b	
Nickel	**15**	2.0	mg/kg	EPA 6010b	
Vanadium	**26**	5.0	mg/kg	EPA 6010b	

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Mike Jaroudi, Project Manager

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Sample ID: SV64-15.0 (27) **Laboratory ID:** T183494-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Zinc	**25**	1.0	mg/kg	EPA 6010b	

Sample ID: SV56-10.0 **Laboratory ID:** T183494-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	5.0	mg/kg	EPA 6010b	
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**39**	2.0	mg/kg	EPA 6010b	
Cobalt	**14**	2.0	mg/kg	EPA 6010b	
Copper	**26**	1.0	mg/kg	EPA 6010b	
Nickel	**30**	2.0	mg/kg	EPA 6010b	
Vanadium	**69**	5.0	mg/kg	EPA 6010b	
Zinc	**72**	1.0	mg/kg	EPA 6010b	

Sample ID: SV56-15.0 **Laboratory ID:** T183494-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**10**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**31**	2.0	mg/kg	EPA 6010b	
Cobalt	**13**	2.0	mg/kg	EPA 6010b	
Copper	**28**	1.0	mg/kg	EPA 6010b	
Nickel	**28**	2.0	mg/kg	EPA 6010b	
Vanadium	**55**	5.0	mg/kg	EPA 6010b	
Zinc	**63**	1.0	mg/kg	EPA 6010b	

Sample ID: SV55-10.0 **Laboratory ID:** T183494-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**19**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**45**	2.0	mg/kg	EPA 6010b	
Cobalt	**17**	2.0	mg/kg	EPA 6010b	
Copper	**30**	1.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Sample ID: SV55-10.0 **Laboratory ID:** T183494-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Nickel	**34**	2.0	mg/kg	EPA 6010b	
Vanadium	**79**	5.0	mg/kg	EPA 6010b	
Zinc	**91**	1.0	mg/kg	EPA 6010b	

Sample ID: SV55-15.0 **Laboratory ID:** T183494-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**22**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**33**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**22**	1.0	mg/kg	EPA 6010b	
Nickel	**24**	2.0	mg/kg	EPA 6010b	
Vanadium	**59**	5.0	mg/kg	EPA 6010b	
Zinc	**62**	1.0	mg/kg	EPA 6010b	

Sample ID: SV60-10.0 **Laboratory ID:** T183494-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**16**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**42**	2.0	mg/kg	EPA 6010b	
Cobalt	**13**	2.0	mg/kg	EPA 6010b	
Copper	**28**	1.0	mg/kg	EPA 6010b	
Nickel	**30**	2.0	mg/kg	EPA 6010b	
Vanadium	**67**	5.0	mg/kg	EPA 6010b	
Zinc	**67**	1.0	mg/kg	EPA 6010b	

Sample ID: SV60-15.0 **Laboratory ID:** T183494-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**12**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**34**	2.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
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Sample ID: SV60-15.0 **Laboratory ID:** T183494-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Cobalt	**13**	2.0	mg/kg	EPA 6010b	
Copper	**23**	1.0	mg/kg	EPA 6010b	
Nickel	**26**	2.0	mg/kg	EPA 6010b	
Vanadium	**62**	5.0	mg/kg	EPA 6010b	
Zinc	**61**	1.0	mg/kg	EPA 6010b	

Sample ID: SV62-10.0 **Laboratory ID:** T183494-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**20**	5.0	mg/kg	EPA 6010b	
Barium	**140**	1.0	mg/kg	EPA 6010b	
Chromium	**43**	2.0	mg/kg	EPA 6010b	
Cobalt	**16**	2.0	mg/kg	EPA 6010b	
Copper	**33**	1.0	mg/kg	EPA 6010b	
Nickel	**35**	2.0	mg/kg	EPA 6010b	
Vanadium	**77**	5.0	mg/kg	EPA 6010b	
Zinc	**77**	1.0	mg/kg	EPA 6010b	
p-Isopropyltoluene	**4.5**	4.2	ug/kg	EPA 8260B/5035	
n-Propylbenzene	**5.4**	4.2	ug/kg	EPA 8260B/5035	
Toluene	**9.0**	4.2	ug/kg	EPA 8260B/5035	

Sample ID: SV62-15.0 **Laboratory ID:** T183494-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**15**	5.0	mg/kg	EPA 6010b	
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**34**	2.0	mg/kg	EPA 6010b	
Cobalt	**14**	2.0	mg/kg	EPA 6010b	
Copper	**24**	1.0	mg/kg	EPA 6010b	
Nickel	**27**	2.0	mg/kg	EPA 6010b	
Vanadium	**66**	5.0	mg/kg	EPA 6010b	
Zinc	**63**	1.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Sample ID: B70-0.5 **Laboratory ID:** T183494-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**3.2**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.7**	0.25	mg/kg	6020 ICP-MS	
4,4´-DDE	**14**	5.0	ug/kg	EPA 8081A	

Sample ID: B70-1.5 **Laboratory ID:** T183494-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**30**	0.25	mg/kg	6020 ICP-MS	
Lead	**7.8**	0.25	mg/kg	6020 ICP-MS	

Sample ID: EB-06 **Laboratory ID:** T183494-14

No Results Detected

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV64-5.0 (17)

T183494-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	440	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*85.6 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/26/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*104 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**14**	5.0	"	"	"	"	"	"	
Barium	**84**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**39**	2.0	"	"	"	"	"	"	
Cobalt	**8.6**	2.0	"	"	"	"	"	"	
Copper	**25**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**23**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**55**	5.0	"	"	"	"	"	"	
Zinc	**49**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV64-5.0 (17)

T183494-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.2	"	"	"	"	"	"	
Bromodichloromethane	ND	4.2	"	"	"	"	"	"	
Bromoform	ND	4.2	"	"	"	"	"	"	
Bromomethane	ND	4.2	"	"	"	"	"	"	
n-Butylbenzene	ND	4.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.2	"	"	"	"	"	"	
Chlorobenzene	ND	4.2	"	"	"	"	"	"	
Chloroethane	ND	4.2	"	"	"	"	"	"	
Chloroform	ND	4.2	"	"	"	"	"	"	
Chloromethane	ND	4.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
Dibromochloromethane	ND	4.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.3	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.2	"	"	"	"	"	"	
Dibromomethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	

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Mike Jaroudi, Project Manager

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV64-5.0 (17)

T183494-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.2	"	"	"	"	"	"	
Isopropylbenzene	ND	4.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.2	"	"	"	"	"	"	
Methylene chloride	ND	4.2	"	"	"	"	"	"	
Naphthalene	ND	4.2	"	"	"	"	"	"	
n-Propylbenzene	ND	4.2	"	"	"	"	"	"	
Styrene	ND	4.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
Tetrachloroethene	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.2	"	"	"	"	"	"	
Trichloroethene	ND	4.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
Vinyl chloride	ND	4.2	"	"	"	"	"	"	
Benzene	ND	4.2	"	"	"	"	"	"	
Toluene	**9.1**	4.2	"	"	"	"	"	"	
Ethylbenzene	ND	4.2	"	"	"	"	"	"	
m,p-Xylene	ND	8.3	"	"	"	"	"	"	
o-Xylene	ND	4.2	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV64-5.0 (17)

T183494-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.1 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*102 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV64-10.0 (22)

T183494-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	510	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*102 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/26/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*117 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**15**	5.0	"	"	"	"	"	"	
Barium	**76**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**32**	2.0	"	"	"	"	"	"	
Cobalt	**7.5**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**23**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**51**	5.0	"	"	"	"	"	"	
Zinc	**50**	1.0	"	"	"	"	"	"	

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SV64-10.0 (22)

T183494-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	5.2	"	"	"	"	"	"	
Bromodichloromethane	ND	5.2	"	"	"	"	"	"	
Bromoform	ND	5.2	"	"	"	"	"	"	
Bromomethane	ND	5.2	"	"	"	"	"	"	
n-Butylbenzene	ND	5.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.2	"	"	"	"	"	"	
Chlorobenzene	ND	5.2	"	"	"	"	"	"	
Chloroethane	ND	5.2	"	"	"	"	"	"	
Chloroform	ND	5.2	"	"	"	"	"	"	
Chloromethane	ND	5.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.2	"	"	"	"	"	"	
Dibromochloromethane	ND	5.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.2	"	"	"	"	"	"	
Dibromomethane	ND	5.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.2	"	"	"	"	"	"	

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SV64-10.0 (22)

T183494-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.2	"	"	"	"	"	"	
Isopropylbenzene	ND	5.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.2	"	"	"	"	"	"	
Methylene chloride	ND	5.2	"	"	"	"	"	"	
Naphthalene	ND	5.2	"	"	"	"	"	"	
n-Propylbenzene	ND	5.2	"	"	"	"	"	"	
Styrene	ND	5.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.2	"	"	"	"	"	"	
Tetrachloroethene	ND	5.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.2	"	"	"	"	"	"	
Trichloroethene	ND	5.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.2	"	"	"	"	"	"	
Vinyl chloride	ND	5.2	"	"	"	"	"	"	
Benzene	ND	5.2	"	"	"	"	"	"	
Toluene	ND	5.2	"	"	"	"	"	"	
Ethylbenzene	ND	5.2	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.2	"	"	"	"	"	"	

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SV64-10.0 (22)

T183494-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.8 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*102 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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SV64-15.0 (27)

T183494-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	540	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*101 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*121 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	11/27/18	"	
Arsenic	ND	5.0	"	"	"	"	11/27/18	"	
Barium	**50**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	11/27/18	"	
Cadmium	ND	2.0	"	"	"	"	11/27/18	"	
Chromium	**19**	2.0	"	"	"	"	11/27/18	"	
Cobalt	**7.2**	2.0	"	"	"	"	11/27/18	"	
Copper	**10**	1.0	"	"	"	"	11/27/18	"	
Lead	ND	3.0	"	"	"	"	11/27/18	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**15**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**26**	5.0	"	"	"	"	11/27/18	"	
Zinc	**25**	1.0	"	"	"	"	11/27/18	"	

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SV64-15.0 (27)

T183494-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									**M-02**
Bromobenzene	ND	5.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	5.2	"	"	"	"	"	"	
Bromodichloromethane	ND	5.2	"	"	"	"	"	"	
Bromoform	ND	5.2	"	"	"	"	"	"	
Bromomethane	ND	5.2	"	"	"	"	"	"	
n-Butylbenzene	ND	5.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.2	"	"	"	"	"	"	
Chlorobenzene	ND	5.2	"	"	"	"	"	"	
Chloroethane	ND	5.2	"	"	"	"	"	"	
Chloroform	ND	5.2	"	"	"	"	"	"	
Chloromethane	ND	5.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.2	"	"	"	"	"	"	
Dibromochloromethane	ND	5.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.2	"	"	"	"	"	"	
Dibromomethane	ND	5.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.2	"	"	"	"	"	"	

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SV64-15.0 (27)

T183494-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									**M-02**
1,2-Dichloropropane	ND	5.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.2	"	"	"	"	"	"	
Isopropylbenzene	ND	5.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.2	"	"	"	"	"	"	
Methylene chloride	ND	5.2	"	"	"	"	"	"	
Naphthalene	ND	5.2	"	"	"	"	"	"	
n-Propylbenzene	ND	5.2	"	"	"	"	"	"	
Styrene	ND	5.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.2	"	"	"	"	"	"	
Tetrachloroethene	ND	5.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.2	"	"	"	"	"	"	
Trichloroethene	ND	5.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.2	"	"	"	"	"	"	
Vinyl chloride	ND	5.2	"	"	"	"	"	"	
Benzene	ND	5.2	"	"	"	"	"	"	
Toluene	ND	5.2	"	"	"	"	"	"	
Ethylbenzene	ND	5.2	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.2	"	"	"	"	"	"	

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SV64-15.0 (27)

T183494-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									**M-02**
Surrogate: Toluene-d8		*95.8 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*89.9 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*108 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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SV56-10.0

T183494-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	510	ug/kg	1	8112625	11/26/18	11/29/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*39.9 %*	*65-135*		"	"	"	"	*S-04*
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*115 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**16**	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	11/27/18	"	
Cadmium	ND	2.0	"	"	"	"	11/27/18	"	
Chromium	**39**	2.0	"	"	"	"	"	"	
Cobalt	**14**	2.0	"	"	"	"	"	"	
Copper	**26**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**30**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**69**	5.0	"	"	"	"	"	"	
Zinc	**72**	1.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV56-10.0

T183494-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.8	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.8	"	"	"	"	"	"	
Bromodichloromethane	ND	4.8	"	"	"	"	"	"	
Bromoform	ND	4.8	"	"	"	"	"	"	
Bromomethane	ND	4.8	"	"	"	"	"	"	
n-Butylbenzene	ND	4.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.8	"	"	"	"	"	"	
Chlorobenzene	ND	4.8	"	"	"	"	"	"	
Chloroethane	ND	4.8	"	"	"	"	"	"	
Chloroform	ND	4.8	"	"	"	"	"	"	
Chloromethane	ND	4.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.8	"	"	"	"	"	"	
Dibromochloromethane	ND	4.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.8	"	"	"	"	"	"	
Dibromomethane	ND	4.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.8	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV56-10.0

T183494-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.8	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.8	"	"	"	"	"	"	
Isopropylbenzene	ND	4.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.8	"	"	"	"	"	"	
Methylene chloride	ND	4.8	"	"	"	"	"	"	
Naphthalene	ND	4.8	"	"	"	"	"	"	
n-Propylbenzene	ND	4.8	"	"	"	"	"	"	
Styrene	ND	4.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.8	"	"	"	"	"	"	
Tetrachloroethene	ND	4.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.8	"	"	"	"	"	"	
Trichloroethene	ND	4.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.8	"	"	"	"	"	"	
Vinyl chloride	ND	4.8	"	"	"	"	"	"	
Benzene	ND	4.8	"	"	"	"	"	"	
Toluene	ND	4.8	"	"	"	"	"	"	
Ethylbenzene	ND	4.8	"	"	"	"	"	"	
m,p-Xylene	ND	9.6	"	"	"	"	"	"	
o-Xylene	ND	4.8	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV56-10.0

T183494-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*102 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*100 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*116 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV56-15.0

T183494-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	500	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*95.1 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*109 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	11/27/18	"	
Arsenic	**10**	5.0	"	"	"	"	11/27/18	"	
Barium	**120**	1.0	"	"	"	"	11/27/18	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	11/27/18	"	
Chromium	**31**	2.0	"	"	"	"	11/27/18	"	
Cobalt	**13**	2.0	"	"	"	"	11/27/18	"	
Copper	**28**	1.0	"	"	"	"	11/27/18	"	
Lead	ND	3.0	"	"	"	"	11/27/18	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**28**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**55**	5.0	"	"	"	"	11/27/18	"	
Zinc	**63**	1.0	"	"	"	"	"	"	

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SV56-15.0

T183494-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.6	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.6	"	"	"	"	"	"	
Bromodichloromethane	ND	4.6	"	"	"	"	"	"	
Bromoform	ND	4.6	"	"	"	"	"	"	
Bromomethane	ND	4.6	"	"	"	"	"	"	
n-Butylbenzene	ND	4.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.6	"	"	"	"	"	"	
Chlorobenzene	ND	4.6	"	"	"	"	"	"	
Chloroethane	ND	4.6	"	"	"	"	"	"	
Chloroform	ND	4.6	"	"	"	"	"	"	
Chloromethane	ND	4.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
Dibromochloromethane	ND	4.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.6	"	"	"	"	"	"	
Dibromomethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.6	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV56-15.0

T183494-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.6	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.6	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.6	"	"	"	"	"	"	
Isopropylbenzene	ND	4.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.6	"	"	"	"	"	"	
Methylene chloride	ND	4.6	"	"	"	"	"	"	
Naphthalene	ND	4.6	"	"	"	"	"	"	
n-Propylbenzene	ND	4.6	"	"	"	"	"	"	
Styrene	ND	4.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
Tetrachloroethene	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.6	"	"	"	"	"	"	
Trichloroethene	ND	4.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
Vinyl chloride	ND	4.6	"	"	"	"	"	"	
Benzene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	4.6	"	"	"	"	"	"	
Ethylbenzene	ND	4.6	"	"	"	"	"	"	
m,p-Xylene	ND	9.1	"	"	"	"	"	"	
o-Xylene	ND	4.6	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV56-15.0

T183494-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*101 %*		*76.1-127*	*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*96.5 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*117 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV55-10.0

T183494-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	550	ug/kg	1	8112625	11/26/18	11/29/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*99.3 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*111 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**19**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	11/27/18	"	
Cadmium	ND	2.0	"	"	"	"	11/27/18	"	
Chromium	**45**	2.0	"	"	"	"	"	"	
Cobalt	**17**	2.0	"	"	"	"	"	"	
Copper	**30**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**34**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**79**	5.0	"	"	"	"	"	"	
Zinc	**91**	1.0	"	"	"	"	"	"	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV55-10.0

T183494-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.0	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV55-10.0

T183494-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	5.0	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	

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SV55-10.0

T183494-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*103 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*102 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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SV55-15.0

T183494-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	390	ug/kg	1	8112625	11/26/18	11/29/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*56.9 %*	*65-135*		"	"	"	"	*S-04*
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*120 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**22**	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**33**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**24**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**59**	5.0	"	"	"	"	"	"	
Zinc	**62**	1.0	"	"	"	"	"	"	

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SV55-15.0

T183494-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.4	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.4	"	"	"	"	"	"	
Bromodichloromethane	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	4.4	"	"	"	"	"	"	
Bromomethane	ND	4.4	"	"	"	"	"	"	
n-Butylbenzene	ND	4.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.4	"	"	"	"	"	"	
Chlorobenzene	ND	4.4	"	"	"	"	"	"	
Chloroethane	ND	4.4	"	"	"	"	"	"	
Chloroform	ND	4.4	"	"	"	"	"	"	
Chloromethane	ND	4.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
Dibromochloromethane	ND	4.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.8	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.4	"	"	"	"	"	"	
Dibromomethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	

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SV55-15.0

T183494-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.4	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.4	"	"	"	"	"	"	
Isopropylbenzene	ND	4.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.4	"	"	"	"	"	"	
Methylene chloride	ND	4.4	"	"	"	"	"	"	
Naphthalene	ND	4.4	"	"	"	"	"	"	
n-Propylbenzene	ND	4.4	"	"	"	"	"	"	
Styrene	ND	4.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
Tetrachloroethene	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.4	"	"	"	"	"	"	
Trichloroethene	ND	4.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
Vinyl chloride	ND	4.4	"	"	"	"	"	"	
Benzene	ND	4.4	"	"	"	"	"	"	
Toluene	ND	4.4	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV55-15.0

T183494-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.7 %*		*76.1-127*	*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*98.2 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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SV60-10.0

T183494-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	400	ug/kg	1	8112625	11/26/18	11/29/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*89.9 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*121 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**16**	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	11/27/18	"	
Cadmium	ND	2.0	"	"	"	"	11/27/18	"	
Chromium	**42**	2.0	"	"	"	"	"	"	
Cobalt	**13**	2.0	"	"	"	"	"	"	
Copper	**28**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**30**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**67**	5.0	"	"	"	"	"	"	
Zinc	**67**	1.0	"	"	"	"	"	"	

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SV60-10.0

T183494-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.2	"	"	"	"	"	"	
Bromodichloromethane	ND	4.2	"	"	"	"	"	"	
Bromoform	ND	4.2	"	"	"	"	"	"	
Bromomethane	ND	4.2	"	"	"	"	"	"	
n-Butylbenzene	ND	4.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.2	"	"	"	"	"	"	
Chlorobenzene	ND	4.2	"	"	"	"	"	"	
Chloroethane	ND	4.2	"	"	"	"	"	"	
Chloroform	ND	4.2	"	"	"	"	"	"	
Chloromethane	ND	4.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
Dibromochloromethane	ND	4.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.2	"	"	"	"	"	"	
Dibromomethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	

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SV60-10.0

T183494-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.2	"	"	"	"	"	"	
Isopropylbenzene	ND	4.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.2	"	"	"	"	"	"	
Methylene chloride	ND	4.2	"	"	"	"	"	"	
Naphthalene	ND	4.2	"	"	"	"	"	"	
n-Propylbenzene	ND	4.2	"	"	"	"	"	"	
Styrene	ND	4.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
Tetrachloroethene	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.2	"	"	"	"	"	"	
Trichloroethene	ND	4.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
Vinyl chloride	ND	4.2	"	"	"	"	"	"	
Benzene	ND	4.2	"	"	"	"	"	"	
Toluene	ND	4.2	"	"	"	"	"	"	
Ethylbenzene	ND	4.2	"	"	"	"	"	"	
m,p-Xylene	ND	8.5	"	"	"	"	"	"	
o-Xylene	ND	4.2	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV60-10.0

T183494-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*99.0 %*		*76.1-127*	*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*100 %*		*85.9-114*	*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*122 %*		*77.8-142*	*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV60-15.0

T183494-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	390	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*77.4 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*123 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**12**	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**34**	2.0	"	"	"	"	"	"	
Cobalt	**13**	2.0	"	"	"	"	"	"	
Copper	**23**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**26**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**62**	5.0	"	"	"	"	"	"	
Zinc	**61**	1.0	"	"	"	"	"	"	

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SV60-15.0

T183494-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.7	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	3.7	"	"	"	"	"	"	
Bromodichloromethane	ND	3.7	"	"	"	"	"	"	
Bromoform	ND	3.7	"	"	"	"	"	"	
Bromomethane	ND	3.7	"	"	"	"	"	"	
n-Butylbenzene	ND	3.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.7	"	"	"	"	"	"	
Chlorobenzene	ND	3.7	"	"	"	"	"	"	
Chloroethane	ND	3.7	"	"	"	"	"	"	
Chloroform	ND	3.7	"	"	"	"	"	"	
Chloromethane	ND	3.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.7	"	"	"	"	"	"	
Dibromochloromethane	ND	3.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.4	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.7	"	"	"	"	"	"	
Dibromomethane	ND	3.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.7	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.7	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.7	"	"	"	"	"	"	

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SV60-15.0

T183494-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	3.7	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	3.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.7	"	"	"	"	"	"	
Isopropylbenzene	ND	3.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.7	"	"	"	"	"	"	
Methylene chloride	ND	3.7	"	"	"	"	"	"	
Naphthalene	ND	3.7	"	"	"	"	"	"	
n-Propylbenzene	ND	3.7	"	"	"	"	"	"	
Styrene	ND	3.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.7	"	"	"	"	"	"	
Tetrachloroethene	ND	3.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.7	"	"	"	"	"	"	
Trichloroethene	ND	3.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.7	"	"	"	"	"	"	
Vinyl chloride	ND	3.7	"	"	"	"	"	"	
Benzene	ND	3.7	"	"	"	"	"	"	
Toluene	ND	3.7	"	"	"	"	"	"	
Ethylbenzene	ND	3.7	"	"	"	"	"	"	
m,p-Xylene	ND	7.4	"	"	"	"	"	"	
o-Xylene	ND	3.7	"	"	"	"	"	"	

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SV60-15.0

T183494-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*99.8 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*98.4 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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T183494-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	370	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*85.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*109 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**20**	5.0	"	"	"	"	"	"	
Barium	**140**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	11/27/18	"	
Cadmium	ND	2.0	"	"	"	"	11/27/18	"	
Chromium	**43**	2.0	"	"	"	"	"	"	
Cobalt	**16**	2.0	"	"	"	"	"	"	
Copper	**33**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**35**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**77**	5.0	"	"	"	"	"	"	
Zinc	**77**	1.0	"	"	"	"	"	"	

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T183494-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.2	"	"	"	"	"	"	
Bromodichloromethane	ND	4.2	"	"	"	"	"	"	
Bromoform	ND	4.2	"	"	"	"	"	"	
Bromomethane	ND	4.2	"	"	"	"	"	"	
n-Butylbenzene	ND	4.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.2	"	"	"	"	"	"	
Chlorobenzene	ND	4.2	"	"	"	"	"	"	
Chloroethane	ND	4.2	"	"	"	"	"	"	
Chloroform	ND	4.2	"	"	"	"	"	"	
Chloromethane	ND	4.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
Dibromochloromethane	ND	4.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.4	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.2	"	"	"	"	"	"	
Dibromomethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	

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T183494-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.2	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.2	"	"	"	"	"	"	
Isopropylbenzene	ND	4.2	"	"	"	"	"	"	
p-Isopropyltoluene	**4.5**	4.2	"	"	"	"	"	"	
Methylene chloride	ND	4.2	"	"	"	"	"	"	
Naphthalene	ND	4.2	"	"	"	"	"	"	
n-Propylbenzene	**5.4**	4.2	"	"	"	"	"	"	
Styrene	ND	4.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
Tetrachloroethene	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.2	"	"	"	"	"	"	
Trichloroethene	ND	4.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
Vinyl chloride	ND	4.2	"	"	"	"	"	"	
Benzene	ND	4.2	"	"	"	"	"	"	
Toluene	**9.0**	4.2	"	"	"	"	"	"	
Ethylbenzene	ND	4.2	"	"	"	"	"	"	
m,p-Xylene	ND	8.4	"	"	"	"	"	"	
o-Xylene	ND	4.2	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV62-10.0

T183494-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*98.5 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*99.0 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV62-15.0

T183494-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C12 (GRO)	ND	560	ug/kg	1	8112625	11/26/18	11/28/18	EPA 8015B/5035	
Surrogate: 4-Bromofluorobenzene		*72.5 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*105 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**15**	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**34**	2.0	"	"	"	"	"	"	
Cobalt	**14**	2.0	"	"	"	"	"	"	
Copper	**24**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**27**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**66**	5.0	"	"	"	"	"	"	
Zinc	**63**	1.0	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV62-15.0

T183494-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.9	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.9	"	"	"	"	"	"	
Bromodichloromethane	ND	4.9	"	"	"	"	"	"	
Bromoform	ND	4.9	"	"	"	"	"	"	
Bromomethane	ND	4.9	"	"	"	"	"	"	
n-Butylbenzene	ND	4.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.9	"	"	"	"	"	"	
Chlorobenzene	ND	4.9	"	"	"	"	"	"	
Chloroethane	ND	4.9	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
Chloromethane	ND	4.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.9	"	"	"	"	"	"	
Dibromochloromethane	ND	4.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.9	"	"	"	"	"	"	
Dibromomethane	ND	4.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.9	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.9	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.9	"	"	"	"	"	"	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

SV62-15.0

T183494-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dichloropropane	ND	4.9	ug/kg	1	8113006	11/26/18	12/01/18	EPA 8260B/5035	
1,3-Dichloropropane	ND	4.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.9	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.9	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.9	"	"	"	"	"	"	
Isopropylbenzene	ND	4.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.9	"	"	"	"	"	"	
Methylene chloride	ND	4.9	"	"	"	"	"	"	
Naphthalene	ND	4.9	"	"	"	"	"	"	
n-Propylbenzene	ND	4.9	"	"	"	"	"	"	
Styrene	ND	4.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.9	"	"	"	"	"	"	
Tetrachloroethene	ND	4.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.9	"	"	"	"	"	"	
Trichloroethene	ND	4.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.9	"	"	"	"	"	"	
Vinyl chloride	ND	4.9	"	"	"	"	"	"	
Benzene	ND	4.9	"	"	"	"	"	"	
Toluene	ND	4.9	"	"	"	"	"	"	
Ethylbenzene	ND	4.9	"	"	"	"	"	"	
m,p-Xylene	ND	9.9	"	"	"	"	"	"	
o-Xylene	ND	4.9	"	"	"	"	"	"	

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SV62-15.0

T183494-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Surrogate: Toluene-d8		*96.9 %*	*76.1-127*		*8113006*	*11/26/18*	*12/01/18*	*EPA 8260B/5035*	
Surrogate: 4-Bromofluorobenzene		*97.9 %*	*85.9-114*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*122 %*	*77.8-142*		*"*	*"*	*"*	*"*	

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B70-0.5

T183494-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**3.2**	0.25	mg/kg	1	8112638	11/26/18	11/28/18	6020 ICP-MS	
Lead	**7.7**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112634	11/26/18	11/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	**14**	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*58.9 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*56.9 %*	*35-140*		"	"	"	"	

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B70-1.5

T183494-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	**30**	0.25	mg/kg	1	8112638	11/26/18	11/28/18	6020 ICP-MS	
Lead	**7.8**	0.25	"	"	"	"	"	"	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112634	11/26/18	11/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.3 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*60.3 %*	*35-140*		*"*	*"*	*"*	*"*	

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EB-06

T183494-14 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C4-C12 (GRO)	ND	50	ug/l	1	8112620	11/28/18	11/29/18	EPA 8015B	
C6-C9 (GRO)	ND	50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.8 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	0.50	mg/l	1	8112137	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	0.50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*103 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	50	ug/l	1	8113015	11/30/18	12/03/18	EPA 6010b	
Silver	ND	50	"	"	"	"	"	"	
Arsenic	ND	50	"	"	"	"	"	"	
Barium	ND	50	"	"	"	"	"	"	
Beryllium	ND	50	"	"	"	"	12/03/18	"	
Cadmium	ND	50	"	"	"	"	12/03/18	"	
Chromium	ND	50	"	"	"	"	"	"	
Cobalt	ND	50	"	"	"	"	"	"	
Copper	ND	50	"	"	"	"	"	"	
Lead	ND	50	"	"	"	"	"	"	
Molybdenum	ND	50	"	"	"	"	"	"	
Nickel	ND	50	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	
Thallium	ND	50	"	"	"	"	"	"	
Vanadium	ND	50	"	"	"	"	"	"	
Zinc	ND	50	"	"	"	"	"	"	

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EB-06

T183494-14 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6020 Method									
Arsenic	ND	1.0	ug/l	1	8112639	11/26/18	11/28/18	6020 ICP-MS	
Lead	ND	2.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	8113016	11/30/18	12/03/18	EPA 7470A Water	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	1.00	ug/l	1	8112623	11/26/18	11/28/18	EPA 8081A	
gamma-BHC (Lindane)	ND	1.00	"	"	"	"	"	"	
beta-BHC	ND	1.00	"	"	"	"	"	"	
delta-BHC	ND	1.00	"	"	"	"	"	"	
Heptachlor	ND	1.00	"	"	"	"	"	"	
Aldrin	ND	1.00	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.00	"	"	"	"	"	"	
gamma-Chlordane	ND	1.00	"	"	"	"	"	"	
alpha-Chlordane	ND	1.00	"	"	"	"	"	"	
Endosulfan I	ND	1.00	"	"	"	"	"	"	
4,4´-DDE	ND	1.00	"	"	"	"	"	"	
Dieldrin	ND	1.00	"	"	"	"	"	"	
Endrin	ND	1.00	"	"	"	"	"	"	
4,4´-DDD	ND	1.00	"	"	"	"	"	"	
Endosulfan II	ND	1.00	"	"	"	"	"	"	
4,4´-DDT	ND	2.00	"	"	"	"	"	"	
Endrin aldehyde	ND	1.00	"	"	"	"	"	"	
Endosulfan sulfate	ND	1.00	"	"	"	"	"	"	
Methoxychlor	ND	5.00	"	"	"	"	"	"	
Endrin ketone	ND	1.00	"	"	"	"	"	"	
Toxaphene	ND	20.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*48.7 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*57.9 %*	*35-140*		*"*	*"*	*"*	*"*	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

EB-06

T183494-14 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8112619	11/26/18	11/27/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

EB-06

T183494-14 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8112619	11/26/18	11/27/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*84.2-108*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*102 %*	*71.5-128*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*99.8 %*	*92.6-108*		*"*	*"*	*"*	*"*	

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112620 - EPA 5030 GC										
Blank (8112620-BLK1)				Prepared: 11/28/18 Analyzed: 11/29/18						
C6-C9 (GRO)	ND	50	ug/l							
C4-C12 (GRO)	ND	50	"							
Surrogate: 4-Bromofluorobenzene	*88.6*		*"*	*100*		*88.6*	*65-135*			
LCS (8112620-BS1)				Prepared: 11/28/18 Analyzed: 11/30/18						
C4-C12 (GRO)	5440	50	ug/l	5500		98.9	75-125			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*65-135*			
LCS Dup (8112620-BSD1)				Prepared: 11/28/18 Analyzed: 11/29/18						
C4-C12 (GRO)	4540	50	ug/l	5500		82.5	75-125	18.1	20	
Surrogate: 4-Bromofluorobenzene	*104*		*"*	*100*		*104*	*65-135*			
Batch 8112625 - EPA 5035 GC										
Blank (8112625-BLK1)				Prepared: 11/26/18 Analyzed: 11/28/18						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*87.5*		*"*	*100*		*87.5*	*65-135*			
LCS (8112625-BS1)				Prepared: 11/26/18 Analyzed: 11/30/18						
C4-C12 (GRO)	9830		ug/kg	10900		90.3	75-125			
Surrogate: 4-Bromofluorobenzene	*101*		*"*	*100*		*101*	*65-135*			
LCS Dup (8112625-BSD1)				Prepared: 11/26/18 Analyzed: 11/28/18						
C4-C12 (GRO)	8350		ug/kg	11000		76.1	75-125	16.3	20	
Surrogate: 4-Bromofluorobenzene	*94.0*		*"*	*100*		*94.0*	*65-135*			

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112137 - EPA 3510C GC										
Blank (8112137-BLK1)				Prepared: 11/21/18 Analyzed: 11/27/18						
C13-C28 (DRO)	ND	0.50	mg/l							
C29-C40 (MORO)	ND	0.50	"							
Surrogate: p-Terphenyl	*4.56*		*"*	*4.00*		*114*	*65-135*			
LCS (8112137-BS1)				Prepared: 11/21/18 Analyzed: 11/27/18						
C13-C28 (DRO)	21.8	0.50	mg/l	20.0		109	75-125			
Surrogate: p-Terphenyl	*4.62*		*"*	*4.00*		*116*	*65-135*			
LCS Dup (8112137-BSD1)				Prepared: 11/21/18 Analyzed: 11/27/18						
C13-C28 (DRO)	21.8	0.50	mg/l	20.0		109	75-125	0.126	20	
Surrogate: p-Terphenyl	*4.53*		*"*	*4.00*		*113*	*65-135*			
Batch 8112138 - EPA 3550B GC										
Blank (8112138-BLK1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*123*		*"*	*102*		*121*	*65-135*			
LCS (8112138-BS1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	510	10	mg/kg	510		99.4	75-125			
Surrogate: p-Terphenyl	*105*		*"*	*102*		*103*	*65-135*			
Matrix Spike (8112138-MS1)		**Source: T183474-09**		Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	490	10	mg/kg	500	ND	98.7	75-125			
Surrogate: p-Terphenyl	*99.4*		*"*	*100*		*99.4*	*65-135*			

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Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112138 - EPA 3550B GC										
Matrix Spike Dup (8112138-MSD1)		**Source: T183474-09**		Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	510	10	mg/kg	500	ND	102	75-125	3.20	20	
Surrogate: p-Terphenyl	*102*		*"*	*100*		*102*	*65-135*			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112642 - EPA 3050B										
Blank (8112642-BLK1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8112642-BS1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Arsenic	94.4	5.0	mg/kg	100		94.4	75-125			
Barium	96.9	1.0	"	100		96.9	75-125			
Cadmium	96.0	2.0	"	100		96.0	75-125			
Chromium	96.8	2.0	"	100		96.8	75-125			
Lead	97.9	3.0	"	100		97.9	75-125			
Matrix Spike (8112642-MS1)	**Source: T183488-40**			Prepared: 11/26/18 Analyzed: 11/27/18						
Arsenic	93.3	5.0	mg/kg	92.6	4.07	96.3	75-125			
Barium	226	1.0	"	92.6	139	93.3	75-125			
Cadmium	96.0	2.0	"	92.6	ND	104	75-125			
Chromium	117	2.0	"	92.6	21.3	103	75-125			
Lead	97.2	3.0	"	92.6	ND	105	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112642 - EPA 3050B										
Matrix Spike Dup (8112642-MSD1)		**Source: T183488-40**		Prepared: 11/26/18 Analyzed: 11/27/18						
Arsenic	89.1	5.0	mg/kg	92.6	4.07	91.9	75-125	4.54	20	
Barium	220	1.0	"	92.6	139	87.2	75-125	2.51	20	
Cadmium	91.1	2.0	"	92.6	ND	98.4	75-125	5.23	20	
Chromium	111	2.0	"	92.6	21.3	97.1	75-125	4.97	20	
Lead	91.4	3.0	"	92.6	ND	98.7	75-125	6.21	20	
Batch 8113015 - EPA 3010A										
Blank (8113015-BLK1)				Prepared: 11/30/18 Analyzed: 12/03/18						
Antimony	ND	50	ug/l							
Silver	ND	50	"							
Arsenic	ND	50	"							
Barium	ND	50	"							
Beryllium	ND	50	"							
Cadmium	ND	50	"							
Chromium	ND	50	"							
Cobalt	ND	50	"							
Copper	ND	50	"							
Lead	ND	50	"							
Molybdenum	ND	50	"							
Nickel	ND	50	"							
Selenium	ND	50	"							
Thallium	ND	50	"							
Vanadium	ND	50	"							
Zinc	ND	50	"							
LCS (8113015-BS1)				Prepared: 11/30/18 Analyzed: 12/03/18						
Arsenic	472	50	ug/l	500		94.3	75-125			
Barium	478	50	"	500		95.6	75-125			
Cadmium	466	50	"	500		93.2	75-125			
Chromium	483	50	"	500		96.5	75-125			
Lead	479	50	"	500		95.8	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8113015 - EPA 3010A										
Matrix Spike (8113015-MS1)		**Source: T183494-14**		Prepared: 11/30/18 Analyzed: 12/03/18						
Arsenic	509	50	ug/l	500	24.8	96.9	75-125			
Barium	511	50	"	500	15.9	99.0	75-125			
Cadmium	462	50	"	500	ND	92.4	75-125			
Chromium	542	50	"	500	ND	108	75-125			
Lead	487	50	"	500	17.5	93.8	75-125			
Matrix Spike Dup (8113015-MSD1)		**Source: T183494-14**		Prepared: 11/30/18 Analyzed: 12/03/18						
Arsenic	511	50	ug/l	500	24.8	97.1	75-125	0.239	20	
Barium	520	50	"	500	15.9	101	75-125	1.85	20	
Cadmium	468	50	"	500	ND	93.6	75-125	1.35	20	
Chromium	556	50	"	500	ND	111	75-125	2.45	20	
Lead	483	50	"	500	17.5	93.1	75-125	0.740	20	

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Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112638 - EPA 3050B										
Blank (8112638-BLK1)				Prepared: 11/26/18 Analyzed: 11/28/18						
Antimony	ND	0.25	mg/kg							
Arsenic	ND	0.25	"							
Beryllium	ND	0.25	"							
Cadmium	ND	0.25	"							
Chromium	ND	0.25	"							
Copper	0.781	0.25	"							QB-01
Lead	ND	0.25	"							
Mercury	ND	0.025	"							
Nickel	ND	0.25	"							
Selenium	ND	1.2	"							
Silver	ND	0.25	"							
Thallium	ND	0.25	"							
Zinc	0.340	0.25	"							QB-01
LCS (8112638-BS1)				Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	27.1	0.25	mg/kg	25.0		109	80-120			
Cadmium	27.1	0.25	"	25.0		108	80-120			
Chromium	26.6	0.25	"	25.0		106	80-120			
Lead	27.8	0.25	"	25.0		111	80-120			
Matrix Spike (8112638-MS1)		**Source: T183463-01**		Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	28.8	0.25	mg/kg	23.8	0.567	118	75-125			
Cadmium	28.3	0.25	"	23.8	0.0368	119	75-125			
Chromium	45.3	0.25	"	23.8	15.9	124	75-125			
Lead	40.8	0.25	"	23.8	9.68	131	75-125			QM-PS
Matrix Spike (8112638-MS2)		**Source: T183463-02**		Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	24.8	0.25	mg/kg	23.4	1.26	101	75-125			
Cadmium	23.9	0.25	"	23.4	0.0955	102	75-125			
Chromium	37.0	0.25	"	23.4	16.4	88.1	75-125			
Lead	57.6	0.25	"	23.4	12.3	194	75-125			QM-05

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Metals by EPA 6020 Method - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112638 - EPA 3050B										
Matrix Spike Dup (8112638-MSD1)		**Source: T183463-01**		Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	28.2	0.25	mg/kg	23.6	0.567	117	75-125	1.80	20	
Cadmium	27.4	0.25	"	23.6	0.0368	116	75-125	3.15	20	
Chromium	45.5	0.25	"	23.6	15.9	126	75-125	0.404	20	QR-04
Lead	42.6	0.25	"	23.6	9.68	140	75-125	4.38	20	QM-PS
Post Spike (8112638-PS1)		**Source: T183463-01**		Prepared: 11/26/18 Analyzed: 11/28/18						
Chromium	42.4		mg/kg	25.0	15.9	106	80-120			
Lead	35.8		"	25.0	9.68	104	80-120			
Batch 8112639 - EPA 3010A										
Blank (8112639-BLK1)				Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	ND	1.0	ug/l							
Lead	ND	2.0	"							
LCS (8112639-BS1)				Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	48.0	1.0	ug/l	50.0		96.0	80-120			
Lead	50.1	2.0	"	50.0		100	80-120			
Matrix Spike (8112639-MS1)		**Source: T183494-14**		Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	47.8	1.0	ug/l	50.0	ND	95.6	75-125			
Lead	48.0	2.0	"	50.0	ND	95.9	75-125			
Matrix Spike Dup (8112639-MSD1)		**Source: T183494-14**		Prepared: 11/26/18 Analyzed: 11/28/18						
Arsenic	49.1	1.0	ug/l	50.0	ND	98.2	75-125	2.67	20	
Lead	49.5	2.0	"	50.0	ND	99.0	75-125	3.16	20	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112640 - EPA 7471A Soil										
Blank (8112640-BLK1)				Prepared & Analyzed: 11/26/18						
Mercury	ND	0.10	mg/kg							
LCS (8112640-BS1)				Prepared & Analyzed: 11/26/18						
Mercury	0.404	0.10	mg/kg	0.391		103	80-120			
Matrix Spike (8112640-MS1)		**Source: T183488-40**		Prepared & Analyzed: 11/26/18						
Mercury	0.421	0.10	mg/kg	0.410	ND	103	75-125			
Matrix Spike Dup (8112640-MSD1)		**Source: T183488-40**		Prepared & Analyzed: 11/26/18						
Mercury	0.392	0.10	mg/kg	0.410	ND	95.7	75-125	6.98	20	
Batch 8113016 - EPA 7470A Water										
Blank (8113016-BLK1)				Prepared: 11/30/18 Analyzed: 12/03/18						
Mercury	ND	0.50	ug/l							
LCS (8113016-BS1)				Prepared: 11/30/18 Analyzed: 12/03/18						
Mercury	4.12	0.50	ug/l	5.00		82.3	80-120			
Matrix Spike (8113016-MS1)		**Source: T183519-11**		Prepared: 11/30/18 Analyzed: 12/03/18						
Mercury	3.01	0.50	ug/l	5.00	0.126	57.8	75-125			QM-05
Matrix Spike Dup (8113016-MSD1)		**Source: T183519-11**		Prepared: 11/30/18 Analyzed: 12/03/18						
Mercury	3.08	0.50	ug/l	5.00	0.126	59.1	75-125	2.14	20	QM-05

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112623 - EPA 3510C GCMS/ECD										
Blank (8112623-BLK1)				Prepared: 11/26/18 Analyzed: 11/28/18						
alpha-BHC	ND	1.00	ug/l							
gamma-BHC (Lindane)	ND	1.00	"							
beta-BHC	ND	1.00	"							
delta-BHC	ND	1.00	"							
Heptachlor	ND	1.00	"							
Aldrin	ND	1.00	"							
Heptachlor epoxide	ND	1.00	"							
gamma-Chlordane	ND	1.00	"							
alpha-Chlordane	ND	1.00	"							
Endosulfan I	ND	1.00	"							
4,4´-DDE	ND	1.00	"							
Dieldrin	ND	1.00	"							
Endrin	ND	1.00	"							
4,4´-DDD	ND	1.00	"							
Endosulfan II	ND	1.00	"							
4,4´-DDT	ND	2.00	"							
Endrin aldehyde	ND	1.00	"							
Endosulfan sulfate	ND	1.00	"							
Methoxychlor	ND	5.00	"							
Endrin ketone	ND	1.00	"							
Toxaphene	ND	20.0	"							
Surrogate: Tetrachloro-meta-xylene	*ND*		*"*	*1.00*		*59.5*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.691*		*"*	*1.00*		*69.1*	*35-140*			
LCS (8112623-BS1)				Prepared: 11/26/18 Analyzed: 11/28/18						
gamma-BHC (Lindane)	3.06	1.00	ug/l	4.00		76.5	40-120			
Heptachlor	3.45	1.00	"	4.00		86.3	40-120			
Aldrin	2.85	1.00	"	4.00		71.2	40-120			
Dieldrin	3.08	1.00	"	4.00		77.1	40-120			
Endrin	3.36	1.00	"	4.00		84.0	40-120			
4,4´-DDT	4.04	2.00	"	4.00		101	40-120			
Surrogate: Tetrachloro-meta-xylene	*0.557*		*"*	*1.00*		*55.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.645*		*"*	*1.00*		*64.5*	*35-140*			

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112623 - EPA 3510C GCMS/ECD										
Matrix Spike (8112623-MS1)		**Source: T183494-14**		Prepared: 11/26/18 Analyzed: 11/28/18						
gamma-BHC (Lindane)	3.36	1.00	ug/l	4.00	0.21	79.0	20-120			
Heptachlor	3.77	1.00	"	4.00	0.26	87.7	20-120			
Aldrin	3.13	1.00	"	4.00	0.17	74.0	20-120			
Dieldrin	3.50	1.00	"	4.00	0.10	85.1	20-120			
Endrin	3.86	1.00	"	4.00	0.10	93.9	20-120			
4,4´-DDT	4.74	2.00	"	4.00	0.08	117	20-120			
Surrogate: Tetrachloro-meta-xylene	*0.609*		*"*	*1.00*		*60.9*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.710*		*"*	*1.00*		*71.0*	*35-140*			
Matrix Spike Dup (8112623-MSD1)		**Source: T183494-14**		Prepared: 11/26/18 Analyzed: 11/28/18						
gamma-BHC (Lindane)	2.98	1.00	ug/l	4.00	0.21	69.4	20-120	12.1	30	
Heptachlor	3.35	1.00	"	4.00	0.26	77.2	20-120	11.8	30	
Aldrin	2.76	1.00	"	4.00	0.17	64.7	20-120	12.6	30	
Dieldrin	3.02	1.00	"	4.00	0.10	73.1	20-120	14.7	30	
Endrin	3.31	1.00	"	4.00	0.10	80.2	20-120	15.3	30	
4,4´-DDT	3.99	2.00	"	4.00	0.08	97.8	20-120	17.2	30	
Surrogate: Tetrachloro-meta-xylene	*0.532*		*"*	*1.00*		*53.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.592*		*"*	*1.00*		*59.2*	*35-140*			
Batch 8112634 - EPA 3550 ECD/GCMS										
Blank (8112634-BLK1)				Prepared: 11/26/18 Analyzed: 11/29/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112634 - EPA 3550 ECD/GCMS										
Blank (8112634-BLK1)				Prepared: 11/26/18 Analyzed: 11/29/18						
Endosulfan II	ND	5.0	ug/kg							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*6.45*		*"*	*9.90*		*65.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.16*		*"*	*9.90*		*62.2*	*35-140*			
LCS (8112634-BS1)				Prepared: 11/26/18 Analyzed: 11/29/18						
gamma-BHC (Lindane)	31.2	5.0	ug/kg	39.6		78.8	40-120			
Heptachlor	35.5	5.0	"	39.6		89.6	40-120			
Aldrin	30.8	5.0	"	39.6		77.9	40-120			
Dieldrin	32.1	5.0	"	39.6		81.2	40-120			
Endrin	33.0	5.0	"	39.6		83.3	40-120			
4,4´-DDT	39.6	5.0	"	39.6		100	33-147			
Surrogate: Tetrachloro-meta-xylene	*6.65*		*"*	*9.90*		*67.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.62*		*"*	*9.90*		*66.9*	*35-140*			
LCS Dup (8112634-BSD1)				Prepared: 11/26/18 Analyzed: 11/29/18						
gamma-BHC (Lindane)	31.3	5.0	ug/kg	39.6		79.0	40-120	0.266	30	
Heptachlor	34.9	5.0	"	39.6		88.1	40-120	1.67	30	
Aldrin	30.7	5.0	"	39.6		77.4	40-120	0.602	30	
Dieldrin	31.4	5.0	"	39.6		79.3	40-120	2.28	30	
Endrin	30.9	5.0	"	39.6		78.0	40-120	6.56	30	
4,4´-DDT	34.0	5.0	"	39.6		85.8	33-147	15.3	30	
Surrogate: Tetrachloro-meta-xylene	*6.60*		*"*	*9.90*		*66.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.30*		*"*	*9.90*		*63.6*	*35-140*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112619 - EPA 5030 GCMS										
Blank (8112619-BLK1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112619 - EPA 5030 GCMS										
Blank (8112619-BLK1)				Prepared: 11/26/18 Analyzed: 11/27/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.7*		*"*	*20.0*		*98.7*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.8*		*"*	*20.0*		*99.2*	*71.5-128*			
Surrogate: Toluene-d8	*19.8*		*"*	*20.0*		*99.1*	*92.6-108*			
LCS (8112619-BS1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Chlorobenzene	20.0	1.0	ug/l	20.0		99.8	79.3-117			
1,1-Dichloroethene	20.8	1.0	"	20.0		104	68.3-130			
Trichloroethene	19.5	1.0	"	20.0		97.5	73.1-108			
Benzene	19.7	0.50	"	20.0		98.7	79.9-118			
Toluene	19.6	0.50	"	20.0		98.2	78.7-116			
Surrogate: 4-Bromofluorobenzene	*19.6*		*"*	*20.0*		*98.1*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.4*		*"*	*20.0*		*102*	*71.5-128*			
Surrogate: Toluene-d8	*19.7*		*"*	*20.0*		*98.4*	*92.6-108*			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112619 - EPA 5030 GCMS										
LCS Dup (8112619-BSD1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Chlorobenzene	20.7	1.0	ug/l	20.0		103	79.3-117	3.49	20	
1,1-Dichloroethene	21.1	1.0	"	20.0		106	68.3-130	1.62	20	
Trichloroethene	20.4	1.0	"	20.0		102	73.1-108	4.71	20	
Benzene	20.4	0.50	"	20.0		102	79.9-118	3.24	20	
Toluene	20.2	0.50	"	20.0		101	78.7-116	2.71	20	
Surrogate: 4-Bromofluorobenzene	*19.7*		*"*	*20.0*		*98.4*	*84.2-108*			
Surrogate: Dibromofluoromethane	*20.3*		*"*	*20.0*		*102*	*71.5-128*			
Surrogate: Toluene-d8	*19.8*		*"*	*20.0*		*99.2*	*92.6-108*			
Batch 8113006 - EPA 5035 GCMS										
Blank (8113006-BLK1)				Prepared: 11/30/18 Analyzed: 12/01/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8113006 - EPA 5035 GCMS										
Blank (8113006-BLK1)				Prepared: 11/30/18 Analyzed: 12/01/18						
1,2-Dichloroethane	ND	5.0	ug/kg							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8113006 - EPA 5035 GCMS										
Blank (8113006-BLK1)				Prepared: 11/30/18 Analyzed: 12/01/18						
Surrogate: Toluene-d8	*38.8*		*ug/kg*	*40.0*		*97.0*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*40.3*		*"*	*40.0*		*101*	*85.9-114*			
Surrogate: Dibromofluoromethane	*43.4*		*"*	*40.0*		*109*	*77.8-142*			
LCS (8113006-BS1)				Prepared: 11/30/18 Analyzed: 12/01/18						
Chlorobenzene	31.0	5.0	ug/kg	40.0		77.4	75-125			
1,1-Dichloroethene	30.4	5.0	"	40.0		76.0	75-125			
Trichloroethene	30.3	5.0	"	40.0		75.6	75-125			
Benzene	31.9	5.0	"	40.0		79.8	75-125			
Toluene	30.3	5.0	"	40.0		75.8	75-125			
Surrogate: Toluene-d8	*41.7*		*"*	*40.0*		*104*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*44.9*		*"*	*40.0*		*112*	*85.9-114*			
Surrogate: Dibromofluoromethane	*47.4*		*"*	*40.0*		*119*	*77.8-142*			
LCS Dup (8113006-BSD1)				Prepared: 11/30/18 Analyzed: 12/01/18						
Chlorobenzene	33.1	5.0	ug/kg	40.0		82.8	75-125	6.68	20	
1,1-Dichloroethene	32.0	5.0	"	40.0		80.1	75-125	5.19	20	
Trichloroethene	33.9	5.0	"	40.0		84.8	75-125	11.3	20	
Benzene	35.3	5.0	"	40.0		88.2	75-125	9.94	20	
Toluene	33.1	5.0	"	40.0		82.7	75-125	8.64	20	
Surrogate: Toluene-d8	*38.5*		*"*	*40.0*		*96.4*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*41.9*		*"*	*40.0*		*105*	*85.9-114*			
Surrogate: Dibromofluoromethane	*43.4*		*"*	*40.0*		*108*	*77.8-142*			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.003	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:57

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to possible sample matrix effect.
QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-PS	The percent recovery and/or RPD are outside acceptance criteria. Results accepted based upon percent recovery results in the post spike and/or serial dilution.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
QB-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
M-02	Multiple analysis yielded poor internal standard and/or surrogate recoveries due to matrix effect. Results reported are from the most complete recovery of internal standards, however, recoveries were not within the acceptable limits of the method.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

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Mike Jaroudi, Project Manager

SunStar Laboratories

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Terra phase Engineering Inc
Address: 19401 Von Karman Ave #460 Irvine CA 92612
Phone: 949-377-2227 Fax:
Project Manager: Clive Sladman

Date: 11.21.18 Page: 1 Of 1
Project Name: Hamilton HS
Collector: Wes Stilling Client Project #: S030.008.002
Batch #: T183494 EDF #:

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel) + motor oil	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081A OCPs	~~8082 PCBs~~ 8082 PCBs	6020 As + PB		Comments/Preservative	Total # of containers
01	SV64-5.0 (17')	11.21.18		Soil	5 Vol, 1402	X					X	X		X							6
02	SV64-10.0 (22')					X					X	X		X							6
03	SV64-15.0 (27')					X					X	X		X							6
04	SV56-10.0					X					X	X		X							6
05	SV56-15.0					X					X	X		X							6
06	SV55-10.0					X					X	X		X							6
07	SV55-15.0					X					X	X		X							6
08	SV60-10.0					X					X	X		X							6
09	SV60-15.0					X					X	X		X							6
10	SV62-10.0					X					X	X		X							6
11	SV62-15.0					X					X	X		X							6
12	B70-0.5													X	X	X		X		Needs 6010 Title 22	1
13	B70-1.5													X	X	X		X		Need 6010 Title 26	1
14	EB-06			Water	1 Amber, 6 Vol, 1250	X					X	X		X	X	X	X				8

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Wes S	11.21.18 1405	[signature]	11-21-18 14:05
[signature]	11/21/18 16:38	[signature]	11/21/18 16:38

Total # of containers	76
Chain of Custody seals Y/N/NA	NA
Seals intact? Y/N/NA	NA
Received good condition/cold	Yes 12.4

Turn around time: STD

Notes
EDD in standard Format
Analyze TPH Gro, Dro/oro

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 180079

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T183494

Client Name: TERRAPHASE ENG. Project: HAMILTON HIGHSCHOOL

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: RYAN Date/Time Courier Received: 11-21-18 / 14:05

Lab Received by: MITCHELL Date/Time Lab Received: 11-21-18 / 16:38

Total number of coolers received: 0

Temperature:	Cooler #1 11.2	°C +/- the CF (1.2°C)	= 12.4	°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (1.2°C)	=	°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (1.2°C)	=	°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? ☐ **Yes** ☒ **No**

If NO:

Samples received on ice? ☒ Yes ☐ **No → Complete Non-Conformance Sheet**

If on ice, samples received same day collected? ☒ Yes → Acceptable ☐ **No → Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample ☐ Yes ☐ No* ☒ N/A

Sample containers intact ☒ Yes ☐ No*

Sample labels match Chain of Custody IDs ~~☐~~ Yes ☒ No* SL

Total number of containers received match COC ☒ Yes ☐ No*

Proper containers received for analyses requested on COC ☒ Yes ☐ No*

Proper preservative indicated on COC/containers for analyses requested ☒ Yes ☐ No* ☐ N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times ☐ **Yes** ☒ **No***

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: SL 11-21-18

Comments:

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SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # 183494

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☒ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☒ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: No sampling times. There are two 5035 kits labeled as (SV64-10.0(22)) which means one of them must be sample (SV62-10.0).

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/26/2018 8:25:57AM

WORK ORDER

T183494

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Mike Jaroudi**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	12/03/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	11/21/18 16:38
Logged In By:	Sunny Lounethone	Date Logged In:	11/21/18 16:54

Samples Received at:	**12.4°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	Yes		

Analysis	Due	TAT	Expires	Comments
T183494-01 SV64-5.0 (17) [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-02 SV64-10.0 (22) [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-03 SV64-15.0 (27) [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183494

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183494-04 SV56-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-05 SV56-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-06 SV55-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-07 SV55-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-08 SV60-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183494

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183494-09 SV60-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-10 SV62-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-11 SV62-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-12 B70-0.5 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	12/03/18 15:00	5	03/21/19 00:00	As and Pb only
8081 Pesticides	12/03/18 15:00	5	12/05/18 00:00	
T183494-13 B70-1.5 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	12/03/18 15:00	5	03/21/19 00:00	As and Pb only
8081 Pesticides	12/03/18 15:00	5	12/05/18 00:00	
T183494-14 EB-06 [Water] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
6020 Metals by ICP-MS	12/03/18 15:00	5	05/20/19 00:00	As and Pb only
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015B Gas Purge	12/03/18 15:00	5	12/05/18 00:00	
8081 Pesticides	12/03/18 15:00	5	11/28/18 00:00	
8082 PCB	12/03/18 15:00	5	11/28/18 00:00	
8260	12/03/18 15:00	5	12/05/18 00:00	

Reviewed By _____ Date _____

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183494

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Mike Jaroudi**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/26/2018 10:41:50AM

WORK ORDER

T183494

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Mike Jaroudi**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	12/03/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	11/21/18 16:38
Logged In By:	Sunny Lounethone	Date Logged In:	11/21/18 16:54

Samples Received at:	**12.4°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	Yes		

Analysis	Due	TAT	Expires	Comments
T183494-01 SV64-5.0 (17) [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-02 SV64-10.0 (22) [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-03 SV64-15.0 (27) [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183494

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183494-04 SV56-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-05 SV56-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-06 SV55-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-07 SV55-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-08 SV60-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T183494

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.003

Analysis	Due	TAT	Expires	Comments
T183494-09 SV60-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-10 SV62-10.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-11 SV62-15.0 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015 m 5035-GRO	12/03/18 15:00	5	12/05/18 00:00	
8260 5035	12/03/18 15:00	5	12/05/18 00:00	
T183494-12 B70-0.5 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	12/03/18 15:00	5	03/21/19 00:00	As and Pb only
8081 Pesticides	12/03/18 15:00	5	12/05/18 00:00	
T183494-13 B70-1.5 [Soil] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6020 Metals by ICP-MS	12/03/18 15:00	5	03/21/19 00:00	As and Pb only
8081 Pesticides	12/03/18 15:00	5	12/05/18 00:00	
T183494-14 EB-06 [Water] Sampled 11/21/18 00:00 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 00:00	
6020 Metals by ICP-MS	12/03/18 15:00	5	05/20/19 00:00	As and Pb only
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 00:00	
8015B Gas Purge	12/03/18 15:00	5	12/05/18 00:00	
8081 Pesticides	12/03/18 15:00	5	11/28/18 00:00	
8260	12/03/18 15:00	5	12/05/18 00:00	

Reviewed By _____ Date _____

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/26/2018 10:41:50AM

WORK ORDER

T183494

Client:	**Terraphase Engineering - Irvine**	**Project Manager:**	**Mike Jaroudi**
Project:	**Hamilton Highschool**	**Project Number:**	**5030.008.003**

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
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03 December 2018

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Ave., Suite 410
Irvine, CA 92612
RE: Hamilton Highschool

Enclosed are the results of analyses for samples received by the laboratory on 11/21/18 16:39. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DRUM-1	T183495-01	Soil	11/21/18 12:15	11/21/18 16:39

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

DETECTIONS SUMMARY

Sample ID: DRUM-1 **Laboratory ID:** T183495-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11**	5.0	mg/kg	EPA 6010b	
Barium	**150**	1.0	mg/kg	EPA 6010b	
Chromium	**36**	2.0	mg/kg	EPA 6010b	
Cobalt	**14**	2.0	mg/kg	EPA 6010b	
Copper	**26**	1.0	mg/kg	EPA 6010b	
Lead	**41**	3.0	mg/kg	EPA 6010b	
Nickel	**32**	2.0	mg/kg	EPA 6010b	
Vanadium	**70**	5.0	mg/kg	EPA 6010b	
Zinc	**80**	1.0	mg/kg	EPA 6010b	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

DRUM-1

T183495-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Purgeable Petroleum Hydrocarbons by EPA 8015B									
C6-C9 (GRO)	ND	500	ug/kg	1	8112624	11/26/18	11/30/18	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*65-135*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015B									
C13-C28 (DRO)	ND	10	mg/kg	1	8112138	11/21/18	11/27/18	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*125 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8112642	11/26/18	11/27/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**11**	5.0	"	"	"	"	"	"	
Barium	**150**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**36**	2.0	"	"	"	"	"	"	
Cobalt	**14**	2.0	"	"	"	"	"	"	
Copper	**26**	1.0	"	"	"	"	"	"	
Lead	**41**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**32**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**70**	5.0	"	"	"	"	"	"	
Zinc	**80**	1.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

DRUM-1

T183495-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8112640	11/26/18	11/26/18	EPA 7471A Soil	
Organochlorine Pesticides by EPA Method 8081A									
alpha-BHC	ND	5.0	ug/kg	1	8112634	11/26/18	11/29/18	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4´-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4´-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4´-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	5.0	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*59.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*59.3 %*	*35-140*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

DRUM-1

T183495-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	10	ug/kg	1	8112637	11/26/18	11/27/18	EPA 8082	
PCB-1221	ND	10	"	"	"	"	"	"	
PCB-1232	ND	10	"	"	"	"	"	"	
PCB-1242	ND	10	"	"	"	"	"	"	
PCB-1248	ND	10	"	"	"	"	"	"	
PCB-1254	ND	10	"	"	"	"	"	"	
PCB-1260	ND	10	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*107 %*	*35-140*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*130 %*	*35-140*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.0	ug/kg	1	8112626	11/26/18	11/29/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

DRUM-1

T183495-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,4-Dichlorobenzene	ND	5.0	ug/kg	1	8112626	11/26/18	11/29/18	EPA 8260B	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

DRUM-1

T183495-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Vinyl chloride	ND	5.0	ug/kg	1	8112626	11/26/18	11/29/18	EPA 8260B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	9.9	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*111 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*93.7 %*	*83.2-113*		"	"	"	"	

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112624 - EPA 5030 GC										
Blank (8112624-BLK1)				Prepared: 11/26/18 Analyzed: 11/29/18						
C6-C9 (GRO)	ND	500	ug/kg							
C4-C12 (GRO)	ND	500	"							
Surrogate: 4-Bromofluorobenzene	*89.9*		*"*	*100*		*89.9*	*65-135*			
LCS (8112624-BS1)				Prepared: 11/26/18 Analyzed: 11/29/18						
C4-C12 (GRO)	10500	500	ug/kg	10900		95.9	75-125			
Surrogate: 4-Bromofluorobenzene	*116*		*"*	*100*		*116*	*65-135*			
Matrix Spike (8112624-MS1)		**Source: T183495-01**		Prepared: 11/26/18 Analyzed: 11/30/18						
C4-C12 (GRO)	10300	500	ug/kg	11000	ND	93.9	65-135			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*65-135*			
Matrix Spike Dup (8112624-MSD1)		**Source: T183495-01**		Prepared: 11/26/18 Analyzed: 11/29/18						
C4-C12 (GRO)	8690	500	ug/kg	11000	ND	79.3	65-135	17.2	20	
Surrogate: 4-Bromofluorobenzene	*103*		*"*	*100*		*103*	*65-135*			

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Mike Jaroudi, Project Manager

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112138 - EPA 3550B GC										
Blank (8112138-BLK1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*123*		*"*	*102*		*121*	*65-135*			
LCS (8112138-BS1)				Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	510	10	mg/kg	510		99.4	75-125			
Surrogate: p-Terphenyl	*105*		*"*	*102*		*103*	*65-135*			
Matrix Spike (8112138-MS1)		**Source: T183474-09**		Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	490	10	mg/kg	500	ND	98.7	75-125			
Surrogate: p-Terphenyl	*99.4*		*"*	*100*		*99.4*	*65-135*			
Matrix Spike Dup (8112138-MSD1)		**Source: T183474-09**		Prepared: 11/21/18 Analyzed: 11/26/18						
C13-C28 (DRO)	510	10	mg/kg	500	ND	102	75-125	3.20	20	
Surrogate: p-Terphenyl	*102*		*"*	*100*		*102*	*65-135*			

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Terraphase Engineering - Irvine	Project: Hamilton Highschool	
18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112642 - EPA 3050B										
Blank (8112642-BLK1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8112642-BS1)				Prepared: 11/26/18 Analyzed: 11/27/18						
Arsenic	94.4	5.0	mg/kg	100		94.4	75-125			
Barium	96.9	1.0	"	100		96.9	75-125			
Cadmium	96.0	2.0	"	100		96.0	75-125			
Chromium	96.8	2.0	"	100		96.8	75-125			
Lead	97.9	3.0	"	100		97.9	75-125			
Matrix Spike (8112642-MS1)	**Source: T183488-40**			Prepared: 11/26/18 Analyzed: 11/27/18						
Arsenic	93.3	5.0	mg/kg	92.6	4.07	96.3	75-125			
Barium	226	1.0	"	92.6	139	93.3	75-125			
Cadmium	96.0	2.0	"	92.6	ND	104	75-125			
Chromium	117	2.0	"	92.6	21.3	103	75-125			
Lead	97.2	3.0	"	92.6	ND	105	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112642 - EPA 3050B										
Matrix Spike Dup (8112642-MSD1)		**Source: T183488-40**		Prepared: 11/26/18 Analyzed: 11/27/18						
Arsenic	89.1	5.0	mg/kg	92.6	4.07	91.9	75-125	4.54	20	
Barium	220	1.0	"	92.6	139	87.2	75-125	2.51	20	
Cadmium	91.1	2.0	"	92.6	ND	98.4	75-125	5.23	20	
Chromium	111	2.0	"	92.6	21.3	97.1	75-125	4.97	20	
Lead	91.4	3.0	"	92.6	ND	98.7	75-125	6.21	20	

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Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112640 - EPA 7471A Soil										
Blank (8112640-BLK1)				Prepared & Analyzed: 11/26/18						
Mercury	ND	0.10	mg/kg							
LCS (8112640-BS1)				Prepared & Analyzed: 11/26/18						
Mercury	0.404	0.10	mg/kg	0.391		103	80-120			
Matrix Spike (8112640-MS1)		**Source: T183488-40**		Prepared & Analyzed: 11/26/18						
Mercury	0.421	0.10	mg/kg	0.410	ND	103	75-125			
Matrix Spike Dup (8112640-MSD1)		**Source: T183488-40**		Prepared & Analyzed: 11/26/18						
Mercury	0.392	0.10	mg/kg	0.410	ND	95.7	75-125	6.98	20	

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112634 - EPA 3550 ECD/GCMS										
Blank (8112634-BLK1)				Prepared: 11/26/18 Analyzed: 11/29/18						
alpha-BHC	ND	5.0	ug/kg							
gamma-BHC (Lindane)	ND	5.0	"							
beta-BHC	ND	5.0	"							
delta-BHC	ND	5.0	"							
Heptachlor	ND	5.0	"							
Aldrin	ND	5.0	"							
Heptachlor epoxide	ND	5.0	"							
gamma-Chlordane	ND	5.0	"							
alpha-Chlordane	ND	5.0	"							
Endosulfan I	ND	5.0	"							
4,4´-DDE	ND	5.0	"							
Dieldrin	ND	5.0	"							
Endrin	ND	5.0	"							
4,4´-DDD	ND	5.0	"							
Endosulfan II	ND	5.0	"							
4,4´-DDT	ND	5.0	"							
Endrin aldehyde	ND	5.0	"							
Endosulfan sulfate	ND	5.0	"							
Methoxychlor	ND	5.0	"							
Endrin ketone	ND	5.0	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*6.45*		*"*	*9.90*		*65.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.16*		*"*	*9.90*		*62.2*	*35-140*			
LCS (8112634-BS1)				Prepared: 11/26/18 Analyzed: 11/29/18						
gamma-BHC (Lindane)	31.2	5.0	ug/kg	39.6		78.8	40-120			
Heptachlor	35.5	5.0	"	39.6		89.6	40-120			
Aldrin	30.8	5.0	"	39.6		77.9	40-120			
Dieldrin	32.1	5.0	"	39.6		81.2	40-120			
Endrin	33.0	5.0	"	39.6		83.3	40-120			
4,4´-DDT	39.6	5.0	"	39.6		100	33-147			
Surrogate: Tetrachloro-meta-xylene	*6.65*		*"*	*9.90*		*67.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.62*		*"*	*9.90*		*66.9*	*35-140*			

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112634 - EPA 3550 ECD/GCMS										
LCS Dup (8112634-BSD1)				Prepared: 11/26/18 Analyzed: 11/29/18						
gamma-BHC (Lindane)	31.3	5.0	ug/kg	39.6		79.0	40-120	0.266	30	
Heptachlor	34.9	5.0	"	39.6		88.1	40-120	1.67	30	
Aldrin	30.7	5.0	"	39.6		77.4	40-120	0.602	30	
Dieldrin	31.4	5.0	"	39.6		79.3	40-120	2.28	30	
Endrin	30.9	5.0	"	39.6		78.0	40-120	6.56	30	
4,4´-DDT	34.0	5.0	"	39.6		85.8	33-147	15.3	30	
Surrogate: Tetrachloro-meta-xylene	*6.60*		*"*	*9.90*		*66.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*6.30*		*"*	*9.90*		*63.6*	*35-140*			

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Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112637 - EPA 3550 ECD/GCMS										
Blank (8112637-BLK1)				Prepared: 11/26/18 Analyzed: 11/27/18						
PCB-1016	ND	10	ug/kg							
PCB-1221	ND	10	"							
PCB-1232	ND	10	"							
PCB-1242	ND	10	"							
PCB-1248	ND	10	"							
PCB-1254	ND	10	"							
PCB-1260	ND	10	"							
Surrogate: Tetrachloro-meta-xylene	*9.93*		*"*	*9.80*		*101*	*35-140*			
Surrogate: Decachlorobiphenyl	*12.7*		*"*	*9.80*		*130*	*35-140*			
LCS (8112637-BS1)				Prepared: 11/26/18 Analyzed: 11/27/18						
PCB-1016	92.0	10	ug/kg	98.0		93.9	40-130			
PCB-1260	104	10	"	98.0		106	40-130			
Surrogate: Tetrachloro-meta-xylene	*8.55*		*"*	*9.80*		*87.2*	*35-140*			
Surrogate: Decachlorobiphenyl	*11.6*		*"*	*9.80*		*118*	*35-140*			
LCS Dup (8112637-BSD1)				Prepared: 11/26/18 Analyzed: 11/27/18						
PCB-1016	104	10	ug/kg	98.0		106	40-130	12.5	30	
PCB-1260	113	10	"	98.0		115	40-130	7.94	30	
Surrogate: Tetrachloro-meta-xylene	*9.52*		*"*	*9.80*		*97.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*12.7*		*"*	*9.80*		*130*	*35-140*			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112626 - EPA 5030 GCMS										
Blank (8112626-BLK1)				Prepared: 11/26/18 Analyzed: 11/29/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	9.9	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							
1,2-Dichloroethane	ND	5.0	"							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112626 - EPA 5030 GCMS										
Blank (8112626-BLK1)				Prepared: 11/26/18 Analyzed: 11/29/18						
p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	9.9	"							
o-Xylene	ND	5.0	"							
Surrogate: 4-Bromofluorobenzene	*41.0*		*"*	*39.8*		*103*	*82.9-116*			
Surrogate: Dibromofluoromethane	*42.1*		*"*	*39.8*		*106*	*80.4-132*			
Surrogate: Toluene-d8	*40.0*		*"*	*39.8*		*101*	*83.2-113*			
LCS (8112626-BS1)				Prepared: 11/26/18 Analyzed: 11/29/18						
Chlorobenzene	41.3	5.0	ug/kg	39.7		104	65.2-124			
1,1-Dichloroethene	40.6	5.0	"	39.7		102	60.9-131			
Trichloroethene	40.8	5.0	"	39.7		103	62.1-126			
Benzene	41.1	5.0	"	39.7		104	65.3-127			
Toluene	39.4	5.0	"	39.7		99.4	64.3-122			
Surrogate: 4-Bromofluorobenzene	*41.2*		*"*	*39.7*		*104*	*82.9-116*			
Surrogate: Dibromofluoromethane	*45.1*		*"*	*39.7*		*114*	*80.4-132*			
Surrogate: Toluene-d8	*37.6*		*"*	*39.7*		*94.8*	*83.2-113*			

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Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112626 - EPA 5030 GCMS										
Matrix Spike (8112626-MS1)		**Source: T183495-01**		Prepared: 11/26/18 Analyzed: 11/29/18						
Chlorobenzene	35.3	4.9	ug/kg	39.5	ND	89.2	75-125			
1,1-Dichloroethene	33.6	4.9	"	39.5	ND	85.1	75-125			
Trichloroethene	34.0	4.9	"	39.5	ND	86.1	75-125			
Benzene	33.9	4.9	"	39.5	ND	85.9	75-125			
Toluene	32.4	4.9	"	39.5	ND	82.0	75-125			
Surrogate: 4-Bromofluorobenzene	*42.2*		*"*	*39.5*		*107*	*82.9-116*			
Surrogate: Dibromofluoromethane	*47.7*		*"*	*39.5*		*121*	*80.4-132*			
Surrogate: Toluene-d8	*37.5*		*"*	*39.5*		*94.8*	*83.2-113*			
Matrix Spike Dup (8112626-MSD1)		**Source: T183495-01**		Prepared: 11/26/18 Analyzed: 11/29/18						
Chlorobenzene	39.0	5.0	ug/kg	40.0	ND	97.5	75-125	10.1	20	
1,1-Dichloroethene	38.3	5.0	"	40.0	ND	95.6	75-125	12.9	20	
Trichloroethene	39.3	5.0	"	40.0	ND	98.2	75-125	14.4	20	
Benzene	36.9	5.0	"	40.0	ND	92.2	75-125	8.32	20	
Toluene	35.1	5.0	"	40.0	ND	87.7	75-125	7.91	20	
Surrogate: 4-Bromofluorobenzene	*38.7*		*"*	*40.0*		*96.7*	*82.9-116*			
Surrogate: Dibromofluoromethane	*42.6*		*"*	*40.0*		*107*	*80.4-132*			
Surrogate: Toluene-d8	*36.5*		*"*	*40.0*		*91.2*	*83.2-113*			

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18401 Von Karman Ave., Suite 410	Project Number: 5030.008.002	**Reported:**
Irvine CA, 92612	Project Manager: Clare Steedman	12/03/18 15:22

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Chain of Custody Record

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Phone: 949-371-2227 Fax:
Project Manager: Clare Steedman

Date: 11.21.18 Page: 1 Of 1
Project Name: Hamilton HS
Collector: Wes Shillings Client Project #: S020.008.002
Batch #: T183495 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel) + motor oil	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	8081 A OCP's	8082 PCB's			Laboratory ID #	Comments/Preservative	Total # of containers
Drum-1	11.21.18	1215	Soil	1 16oz	X					X	X		X	X	X			01		1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Wes S	11/21/18 15:50	[signature]	11/21/18 15:50
[signature]	11/21/18 16:39	[signature]	11/21/18 16:39

Total # of containers: 1
Chain of Custody seals Y/N/NA: NA
Seals intact? Y/N/NA: NA
Received good condition/cold: Yes 13.3

Turn around time: STD

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T183495

Client Name: Terraphase - Irvine Project: Hamilton HS

Delivered by: ☒ **Client** ☐ **SunStar Courier** ☐ **GSO** ☐ **FedEx** ☐ **Other**

If Courier, Received by: Ryan Date/Time Courier Received: 11-21-18 15:50

Lab Received by: Mitchell Date/Time Lab Received: 11-21-18 16:39

Total number of coolers received: 0

Temperature:	Cooler #1	11.3 °C +/- the CF (1.2°C) =	13.3	°C	corrected temperature
Temperature:	Cooler #2	°C +/- the CF (1.2°C) =		°C	corrected temperature
Temperature:	Cooler #3	°C +/- the CF (1.2°C) =		°C	corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? ☐ **Yes** ☒ **No**

If NO:

Samples received on ice? ☒ Yes ☐ **No → Complete Non-Conformance Sheet**

If on ice, samples received same day collected? ☒ Yes → Acceptable ☐ **No → Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☐ Yes	☐ No*	☒ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☒ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date: DM 11-21-18

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 11/21/2018 5:41:31PM

WORK ORDER

T183495

Client: Terraphase Engineering - Irvine
Project: Hamilton Highschool
Project Manager: Mike Jaroudi
Project Number: 5030.008.002

Report To:
Terraphase Engineering - Irvine
Clare Steedman
18401 Von Karman Ave., Suite 410
Irvine, CA 92612

Date Due:	12/03/18 17:00 (5 day TAT)		
Received By:	Mitchell Webster	Date Received:	11/21/18 16:39
Logged In By:	Dan Marteski	Date Logged In:	11/21/18 17:16

Samples Received at:	**13.3°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T183495-01 DRUM-1 [Soil] Sampled 11/21/18 12:15 (GMT-08:00) Pacific Time (US &				
6010 Title 22	12/03/18 15:00	5	05/20/19 12:15	
8015 CC (D/MO)	12/03/18 15:00	5	12/05/18 12:15	
8015B Gas Purge	12/03/18 15:00	5	12/05/18 12:15	
8081 Pesticides	12/03/18 15:00	5	12/05/18 12:15	
8082 PCB	12/03/18 15:00	5	12/05/18 12:15	
8260	12/03/18 15:00	5	12/05/18 12:15	

Analysis groups included in this work order

6010 Title 22

subgroup 6010B T22 7470/71 Hg

Reviewed By

Date

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Terraphase Engineering
Address: 18401 Von Karman Ave, Suite #410
Irvine, CA 92612

Attn: Clare Steedman

Comments: Hamilton High School - LAUSD
S030.008.001
2955 S. Robertson Boulevard, Los Angeles, CA

Lab Request: 412613
Report Date: 02/26/2019
Date Received: 02/19/2019
Client ID: 15743

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
412613-001	AB01-1.0	412613-025	AB07-1.0	412613-049	AB06-5.0
412613-002	AB01-5.0	412613-026	AB07-5.0	412613-050	AB06-10.0
412613-003	AB01-10.0	412613-027	AB07-10.0	412613-051	AB06-15.0
412613-004	AB01-15.0	412613-028	AB07-15.0	412613-052	AB06-20.0
412613-005	AB01-20.0	412613-029	AB07-20.0	412613-053	AB06-25.0
412613-006	AB01-25.0	412613-030	AB07-20.0-DUP	412613-054	AB06-30.0
412613-007	AB01-30.0	412613-031	AB07-25.0	412613-055	AB04-1.0
412613-008	AB02-1.0	412613-032	AB07-30.0	412613-056	AB04-5.0
412613-009	AB02-5.0	412613-033	AB05-1.0	412613-057	AB04-5.0-DUP
412613-010	AB02-10.0	412613-034	AB05-1.0-DUP	412613-058	AB04-10.0
412613-011	AB02-15.0	412613-035	AB05-5.0	412613-059	AB04-15.0
412613-012	AB02-15.0-DUP	412613-036	AB05-10.0	412613-060	AB04-20.0
412613-013	AB02-20.0	412613-037	AB05-15.0	412613-061	AB04-25.0
412613-014	AB02-25.0	412613-038	AB05-20.0	412613-062	AB04-30.0
412613-015	AB02-29.0	412613-039	AB05-25.0	412613-063	AB09-1.0
412613-016	AB03-1.0	412613-040	AB05-29.5	412613-064	AB09-5.0
412613-017	AB03-5.0	412613-041	AB08-1.0	412613-065	AB09-10.0
412613-018	AB03-10.0	412613-042	AB08-5.0	412613-066	AB09-10.0-DUP
412613-019	AB03-10.0-DUP	412613-043	AB08-10.0	412613-067	AB09-15.0
412613-020	AB03-15.0	412613-044	AB08-15.0	412613-068	AB09-20.0
412613-021	AB03-20.0	412613-045	AB08.20.0	412613-069	AB09-25.0
412613-022	AB03-25.0	412613-046	AB08-25.0	412613-070	EB1
412613-023	AB03-25.0-DUP	412613-047	AB08-29.5	412613-071	EB2
412613-024	AB03-30.0	412613-048	AB06-1.0		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Diane M. Galvan

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 07:52 **Site:**
Sample #: **412613-001** **Client Sample #:** AB01-1.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**9.98**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:01 **Site:**
Sample #: **412613-002** **Client Sample #:** AB01-5.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**12.2**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:15 **Site:**
Sample #: **412613-003** **Client Sample #:** AB01-10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**11.2**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:21 **Site:**
Sample #: **412613-004** **Client Sample #:** AB01-15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**14.6**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:28 **Site:**
Sample #: **412613-005** **Client Sample #:** AB01-20.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**10.1**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:35 **Site:**
Sample #: **412613-006** **Client Sample #:** AB01-25.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**14.4**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:46 **Site:**
Sample #: **412613-007** **Client Sample #:** AB01-30.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**11.9**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 02/18/2019 08:48 **Site:**
Sample #: **412613-008** **Client Sample #:** AB02-1.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1211546		
Arsenic	**13.5**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 08:52	Site:			
Sample #:	**412613-009**	Client Sample #:	AB02-5.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**10.7**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:00	Site:			
Sample #:	**412613-010**	Client Sample #:	AB02-10.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**14.2**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:05	Site:			
Sample #:	**412613-011**	Client Sample #:	AB02-15.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**14.6**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:05	Site:			
Sample #:	**412613-012**	Client Sample #:	AB02-15.0-DUP	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**20.0**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:10	Site:			
Sample #:	**412613-013**	Client Sample #:	AB02-20.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**13.9**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:15	Site:			
Sample #:	**412613-014**	Client Sample #:	AB02-25.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**9.40**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:30	Site:			
Sample #:	**412613-015**	Client Sample #:	AB02-29.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**12.0**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 09:35	Site:			
Sample #:	**412613-016**	Client Sample #:	AB03-1.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**9.05**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 09:40	**Site:**			
Sample #:	**412613-017**	**Client Sample #:**	AB03-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**10.8**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 09:50	**Site:**			
Sample #:	**412613-018**	**Client Sample #:**	AB03-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**13.2**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 09:50	**Site:**			
Sample #:	**412613-019**	**Client Sample #:**	AB03-10.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**13.0**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 09:53	**Site:**			
Sample #:	**412613-020**	**Client Sample #:**	AB03-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211546		
Arsenic	**12.0**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 09:58	**Site:**			
Sample #:	**412613-021**	**Client Sample #:**	AB03-20.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**11.8**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 10:05	**Site:**			
Sample #:	**412613-022**	**Client Sample #:**	AB03-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**15.5**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 10:05	**Site:**			
Sample #:	**412613-023**	**Client Sample #:**	AB03-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**10.5**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 10:10	**Site:**			
Sample #:	**412613-024**	**Client Sample #:**	AB03-30.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**6.12**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 11:35	**Site:**			
Sample #:	**412613-025**	**Client Sample #:**	AB07-1.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**9.68**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 11:50	**Site:**			
Sample #:	**412613-026**	**Client Sample #:**	AB07-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**10.6**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 12:00	**Site:**			
Sample #:	**412613-027**	**Client Sample #:**	AB07-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**16.1**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 12:07	**Site:**			
Sample #:	**412613-028**	**Client Sample #:**	AB07-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**15.8**	1	0.108	0.3	mg/Kg	02/21/19	02/21/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 12:20	**Site:**			
Sample #:	**412613-029**	**Client Sample #:**	AB07-20.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**15.7**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 12:20	**Site:**			
Sample #:	**412613-030**	**Client Sample #:**	AB07-20.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**10.4**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 12:30	**Site:**			
Sample #:	**412613-031**	**Client Sample #:**	AB07-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**9.54**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 12:45	**Site:**			
Sample #:	**412613-032**	**Client Sample #:**	AB07-30.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**2.74**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:30	Site:			
Sample #:	**412613-033**	Client Sample #:	AB05-1.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**9.41**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:30	Site:			
Sample #:	**412613-034**	Client Sample #:	AB05-1.0-DUP	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**11.7**	2	0.216	0.6	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:38	Site:			
Sample #:	**412613-035**	Client Sample #:	AB05-5.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**12.1**	2	0.216	0.6	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:55	Site:			
Sample #:	**412613-036**	Client Sample #:	AB05-10.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**10.6**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:53	Site:			
Sample #:	**412613-037**	Client Sample #:	AB05-15.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**17.1**	2	0.216	0.6	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 14:04	Site:			
Sample #:	**412613-038**	Client Sample #:	AB05-20.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**11.8**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 14:10	Site:			
Sample #:	**412613-039**	Client Sample #:	AB05-25.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**9.67**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 14:20	Site:			
Sample #:	**412613-040**	Client Sample #:	AB05-29.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211548		
Arsenic	**5.11**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 14:52	Site:			
Sample #:	**412613-041**	Client Sample #:	AB08-1.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**4.00**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:05	Site:			
Sample #:	**412613-042**	Client Sample #:	AB08-5.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**9.75**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:25	Site:			
Sample #:	**412613-043**	Client Sample #:	AB08-10.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**10.9**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:30	Site:			
Sample #:	**412613-044**	Client Sample #:	AB08-15.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.8**	1	0.108	0.3	mg/Kg	02/21/19	02/22/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:35	Site:			
Sample #:	**412613-045**	Client Sample #:	AB08.20.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.0**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:40	Site:			
Sample #:	**412613-046**	Client Sample #:	AB08-25.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**11.3**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:41	Site:			
Sample #:	**412613-047**	Client Sample #:	AB08-29.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**18.6**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 15:55	Site:			
Sample #:	**412613-048**	Client Sample #:	AB06-1.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.9**	2	0.216	0.6	mg/Kg	02/21/19	02/26/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 16:00	Site:	
Sample #: **412613-049**	Client Sample #: AB06-5.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**11.2**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 16:10	Site:	
Sample #: **412613-050**	Client Sample #: AB06-10.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**17.5**	2	0.216	0.6	mg/Kg	02/21/19	02/26/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 16:15	Site:	
Sample #: **412613-051**	Client Sample #: AB06-15.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**11.0**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 16:20	Site:	
Sample #: **412613-052**	Client Sample #: AB06-20.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.8**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 16:25	Site:	
Sample #: **412613-053**	Client Sample #: AB06-25.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.7**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 16:30	Site:	
Sample #: **412613-054**	Client Sample #: AB06-30.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**2.67**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 11:36	Site:	
Sample #: **412613-055**	Client Sample #: AB04-1.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.6**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 02/18/2019 11:49	Site:	
Sample #: **412613-056**	Client Sample #: AB04-5.0	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**11.5**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 11:49	Site:			
Sample #:	**412613-057**	Client Sample #:	AB04-5.0-DUP	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**11.2**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 12:03	Site:			
Sample #:	**412613-058**	Client Sample #:	AB04-10.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**15.0**	2	0.216	0.6	mg/Kg	02/21/19	02/26/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 12:11	Site:			
Sample #:	**412613-059**	Client Sample #:	AB04-15.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**19.0**	2	0.216	0.6	mg/Kg	02/21/19	02/26/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 12:26	Site:			
Sample #:	**412613-060**	Client Sample #:	AB04-20.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211549		
Arsenic	**12.8**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 12:46	Site:			
Sample #:	**412613-061**	Client Sample #:	AB04-25.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**13.4**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 12:54	Site:			
Sample #:	**412613-062**	Client Sample #:	AB04-30.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**12.9**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:31	Site:			
Sample #:	**412613-063**	Client Sample #:	AB09-1.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**10.3**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	02/18/2019 13:43	Site:			
Sample #:	**412613-064**	Client Sample #:	AB09-5.0	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**13.6**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 13:58	**Site:**			
Sample #:	**412613-065**	**Client Sample #:**	AB09-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**17.7**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 13:58	**Site:**			
Sample #:	**412613-066**	**Client Sample #:**	AB09-10.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**15.1**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 14:06	**Site:**			
Sample #:	**412613-067**	**Client Sample #:**	AB09-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**12.0**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 14:33	**Site:**			
Sample #:	**412613-068**	**Client Sample #:**	AB09-20.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**11.9**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 14:59	**Site:**			
Sample #:	**412613-069**	**Client Sample #:**	AB09-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1211550		
Arsenic	**11.7**	1	0.108	0.3	mg/Kg	02/21/19	02/25/19	SBW	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 15:55	**Site:**			
Sample #:	**412613-070**	**Client Sample #:**	EB1	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3010A						QCBatchID: QC1211502		
Arsenic	ND	1	0.31	2	ug/L	02/20/19	02/21/19	SBW	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	02/18/2019 16:00	**Site:**			
Sample #:	**412613-071**	**Client Sample #:**	EB2	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3010A						QCBatchID: QC1211502		
Arsenic	ND	1	0.31	2	ug/L	02/20/19	02/21/19	SBW	

QCBatchID:	**QC1211502**	**Analyst:**	sbailey-woo	**Method:**	EPA 6020
Matrix:	Water	**Analyzed:**	02/20/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1211502MB1					
Arsenic	ND	ug/L	0.31	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211502LCS1											
Arsenic	50		48.2		ug/L	96			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211502MS1, QC1211502MSD1												**Source: 412613-070**
Arsenic	ND	50	50	45.7	44.6	ug/L	91	89	2.4	75-125	20	

QCBatchID:	**QC1211546**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	02/21/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1211546MB1					
Arsenic	ND	mg/Kg	0.108	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211546LCS1											
Arsenic	50		55.8		mg/Kg	112			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211546MS1, QC1211546MSD1												**Source: 412613-001**
Arsenic	9.98	50	50	58.2	53.4	mg/Kg	96	87	8.6	75-125	20	

QCBatchID:	**QC1211548**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	02/21/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1211548MB1					
Arsenic	ND	mg/Kg	0.108	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211548LCS1											
Arsenic	50		52.7		mg/Kg	105			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211548MS1, QC1211548MSD1												**Source: 412613-021**
Arsenic	11.8	50	50	59.5	60.0	mg/Kg	95	96	0.8	75-125	20	

QCBatchID:	**QC1211549**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	02/21/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1211549MB1					
Arsenic	ND	mg/Kg	0.108	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211549LCS1											
Arsenic	50		49.4		mg/Kg	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211549MS1, QC1211549MSD1												**Source: 412613-041**
Arsenic	4.00	50	50	46.4	45.6	mg/Kg	85	83	1.7	75-125	20	

QCBatchID:	**QC1211550**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	02/21/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1211550MB1					
Arsenic	ND	mg/Kg	0.108	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211550LCS1											
Arsenic	50		52.5		mg/Kg	105			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1211550MS1, QC1211550MSD1												**Source: 412613-061**
Arsenic	13.4	50	50	63.0	66.7	mg/Kg	99	107	5.7	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave., Orange, CA 92868 Phone: (714) 771-6900 Fax: (714) 538-1209	Lab No: 412613 Page: 1 of 8	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School - LAUSD
Report To:	Clare Steedman	Number:	S030.008.001
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave, Ste. 410	Address:	2955 S Robertson Boulevard
	Irvine, CA 92612		Los Angeles, CA
Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	DAN PHELPS / TANNER RICKARD

Analysis Request: Arsenic (EPA Method 6020)

Test Instructions / Comments: Please provide EDD

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)
	AB01-1.0	02/18/19	0752	S	1 Jar	Ice	X
	AB01-5.0	02/18/19	0801	S	1 Jar	Ice	X
	AB01-10.0	02/18/19	0815	S	1 Jar	Ice	X
	AB01-15.0	02/18/19	0821	S	1 Jar	Ice	X
	AB01-20.0	02/18/19	0828	S	1 Jar	Ice	X
	AB01-25.0	02/18/19	0835	S	1 Jar	Ice	X
	AB01-30.0	02/18/19	0846	S	1 Jar	Ice	X
	AB02-1.0	02/18/19	0848	S	1 Jar	Ice	X
	AB02-5.0	02/18/19	0852	S	1 Jar	Ice	X
	AB02-10.0	02/18/19	0900	S	1 Jar	Ice	X

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI Geologist	2/19/19 1055
1 Received By:	[signature]	Max Montiel	Enthalpy A.	2/19/19 1055
2 Relinquished By:	[signature]	Max Montiel	Enthalpy A.	2/19/19 1330
2 Received By:	[signature]	A Hernandez	E.A.	2/19/19 1330
3 Relinquished By:				
3 Received By:				

0.1 5.4

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	Irvine, CA 92612		Los Angeles, CA
Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	Dan Phelps/Tanner Rickard

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)	Test Instructions / Comments
	AB02-15.0	02/18/19	0905	S	1 Jar	Ice	X	
	AB02-15.0-DUP	02/18/19	0905	S	1 Jar	Ice	X	
	AB02-20.0	02/18/19	0910	S	1 Jar	Ice	X	
	AB02-25.0	02/18/19	0915	S	1 Jar	Ice	X	
	AB02-29.0	02/18/19	0930	S	1 Jar	Ice	X	
	AB03-1.0	02/18/19	0935	S	1 Jar	Ice	X	
	AB03-5.0	02/18/19	0940	S	1 Jar	Ice	X	
	AB03-10.0	02/18/19	0950	S	1 Jar	Ice	X	
	AB03-10.0-DUP	02/18/19	0950	S	1 Jar	Ice	X	
20	AB03-15.0	02/18/19	0953	S	1 Jar	Ice	X	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI - Geologist	2/19/19 1055
1 Received By:	[signature]	Max Montiel	Enthalpy A.	2/19/19 1055
2 Relinquished By:	[signature]	Max Montiel	Enthalpy A.	2/19/19 1330
2 Received By:	[signature]	G Hernandez	E.A.	2/19/19 1330
3 Relinquished By:				
3 Received By:				

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Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	DAN PHELPS / TANNER RICKARD

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)	Test Instructions / Comments
	AB03-20.0	02/18/19	0958	S	1 Jar	Ice	X	
	AB03-25.0	02/18/19	1005	S	1 Jar	Ice	X	
	AB03-25.0-DUP	02/18/19	1005	S	1 Jar	Ice	X	
	AB03-30.0	02/18/19	1010	S	1 Jar	Ice	X	
	AB07-1.0	02/18/19	1135	S	1 Jar	Ice	X	
	AB07-5.0	02/18/19	1150	S	1 Jar	Ice	X	
	AB07-10.0	02/18/19	1200	S	1 Jar	Ice	X	
	AB07-15.0	02/18/19	1207	S	1 Jar	Ice	X	
	AB07-20.0	02/18/19	1220	S	1 Jar	Ice	X	
30	AB07-20.0-DUP	02/18/19	1220	S	1 Jar	Ice	X	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	Tanner Rickard	Tanner Rickard	TEI - Geologist	2/19/19 1055
1 Received By:	Max Montiel	Max Montiel	Enthalpy A	2/19/19 1055
2 Relinquished By:	Max Montiel	Max Montiel	Enthalpy A.	2/19/19 1330
2 Received By:	[illegible]	GHernandez	E.A.	2/19/19 1330
3 Relinquished By:				
3 Received By:				

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Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)										Test Instructions / Comments
	AB07-25.0	02/18/19	1230	S	1 Jar	Ice	X										
	AB07-30.0	02/18/19	1245	S	1 Jar	Ice	X										
	AB05-1.0	02/18/19	1330	S	1 Jar	Ice	X										
	AB05-1.0-DUP	02/18/19	1330	S	1 Jar	Ice	X										
	AB05-5.0	02/18/19	1338	S	1 Jar	Ice	X										
	AB05-10.0	02/18/19	1355	S	1 Jar	Ice	X										
	AB05-15.0	02/18/19	1358	S	1 Jar	Ice	X										
	AB05-20.0	02/18/19	1404	S	1 Jar	Ice	X										
	AB05-25.0	02/18/19	1410	S	1 Jar	Ice	X										
	AB05-29.5	02/18/19	1420	S	1 Jar	Ice	X										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	Tam Rick	Tanner Rickard	TEI Geologist	2/19/19 1055
1 Received By:	Max Montiel	Max Montiel	Enthalpy A	2/19/19 1055
2 Relinquished By:	Max Montiel	Max Montiel	Enthalpy A	2/19/19 1330
2 Received By:	[illegible]	[illegible]	E-to	2/19/19 1330
3 Relinquished By:				
3 Received By:				

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Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)										Test Instructions / Comments
	AB08-1.0	02/18/19	1452	S	1 Jar	Ice	X										
	AB08-5.0	02/18/19	1505	S	1 Jar	Ice	X										
	AB08-10.0	02/18/19	1525	S	1 Jar	Ice	X										
	AB08-15.0	02/18/19	1530	S	1 Jar	Ice	X										
	AB08-20.0	02/18/19	1535	S	1 Jar	Ice	X										
	AB08-25.0	02/18/19	1540	S	1 Jar	Ice	X										
	AB08-29.5	02/18/19	1541	S	1 Jar	Ice	X										
	AB06-1.0	02/18/19	1555	S	1 Jar	Ice	X										
	AB06-5.0	02/18/19	1600	S	1 Jar	Ice	X										
	AB06-10.0	02/18/19	1610	S	1 Jar	Ice	X										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	Tanner Rickard	Tanner Rickard	TEI Geologist	2/19/19 1055
1 Received By:	Max Montiel	Max Montiel	Enthalpy A	2/19/19 1055
2 Relinquished By:	Max Montiel	Max Montiel	Enthalpy A	2/19/19 1330
2 Received By:	[illegible]	C Hernandez	EA	2/19/19 1330
3 Relinquished By:				
3 Received By:				

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931 W. Barkley Ave., Orange, CA 92868 Phone: (714) 771-6900 Fax: (714) 538-1209	Lab No: Page: 6 of 8	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

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	Irvine, CA 92612		Los Angeles, CA
Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)	Test Instructions / Comments
SS	AB06-15.0	02/18/19	1615	S	1 Jar	Ice	X	
SS	AB06-20.0	02/18/19	1620	S	1 Jar	Ice	X	
SS	AB06-25.0	02/18/19	1625	S	1 Jar	Ice	X	
SS	AB06-30.0	02/18/19	1630	S	1 Jar	Ice	X	
		~~02/18/19~~		~~S~~	~~1 Jar~~	~~Ice~~		
		02/18/19		~~S~~	~~1 Jar~~	~~Ice~~		
		02/18/19		~~S~~	~~1 Jar~~	Ice		
		~~02/18/19~~		~~S~~	~~1 Jar~~	Ice		
		02/18/19		~~S~~	~~1 Jar~~	Ice		
		02/18/19		~~S~~	~~1 Jar~~	Ice		

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	TEI - Geologist	2/19/19 1055
1 Received By:	[illegible]	Max Montiel	Enthalpy A.	2/19/19 1055
2 Relinquished By:	[illegible]	Max Montiel	Enthalpy A.	2/19/19 1330
2 Received By:	[illegible]	C. A. Mendez	EA	2/19/19 1330
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
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Phone: (714) 771-6900 Fax: (714) 538-1209	Page: 7 of 8	2 Day: ; 1 Day: ; Same Day:
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Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	T Rickard / D Phelps

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)										Test Instructions / Comments
	AB04-1.0	02/18/19	11:36	S	1 Jar	Ice	X										
	AB04-5.0	02/18/19	11:49	S	1 Jar	Ice	X										
	AB04-5.0-DUP	02/18/19	1149	S	1 Jar	Ice	X										
	AB04-10.0	02/18/19	1203	S	1 Jar	Ice	X										
	AB04-15.0	02/18/19	1211	S	1 Jar	Ice	X										
	AB04-20.0	02/18/19	1226	S	1 Jar	Ice	X										
	AB04-25.0	02/18/19	1246	S	1 Jar	Ice	X										
	AB04-30.0	02/18/19	1254	S	1 Jar	Ice	X										
	AB09-1.0	02/18/19	1331	S	1 Jar	Ice	X										
	AB09-5.0	02/18/19	1343	S	1 Jar	Ice	X										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	TEI - Geologist	2/19/19 1055
1 Received By:	[illegible]	Max Montiel	Enthalpy A.	2/19/19 1055
2 Relinquished By:	[illegible]	Max Montiel	Enthalpy A	2/19/19 1330
2 Received By:	[illegible]	G Hernandez	EA	2/19/19 1330
3 Relinquished By:				
3 Received By:				

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c/o Montrose Environmental Group							
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ENTHALPY analytical, inc.

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Phone:	949.377.2227 ext. 89	Global ID:	
Cell:	213.422.5850	Sampled By:	T Rickard / D Phelps

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Arsenic (EPA Method 6020)	Test Instructions / Comments
65	AB09-10.0	2/18/19	1358	S	1x8oz Jar	Ice	X	
66	AB09-10.0 - DUP		1358				X	
67	AB09-15.0		1406				X	
68	AB09-20.0		1433				X	
69	AB09-25.0		1459	S	1x8oz Jar	Ice	X	
70	EB1		1555	W	1 poly	Ice/Acid	X	
71	EB2	2/18/19	1600	W	1 poly	Ice/Acid	X	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	Tan Rickard	Tanner Rickard	TEI Geologist	2/19/19 1055
1 Received By:	Max Montiel	Max Montiel	Enthalpy A.	2/19/19 1055
2 Relinquished By:	Max Montiel	Max Montiel	Enthalpy A	2/19/19 1330
2 Received By:	[illegible]	G Hernandez	EA	2/19/19 1330
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Engineering Project: _____

Date Received: 02/19/19 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 5.4 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.4 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 2/19/19

Enthalpy Analytical Field Technician Request Form

Version # 2.7
Effective 9/10/15

Client Info

Client Name:	Terraphase Engineering
Address:	18401 Von Karman Avenue, Suite 410
City:	Irvine, CA 92612
Ordered By:	Tanner Rickard
Client Project Manager:	
Phone:	(o) 949-377-2227 x 142 (c) 310-971-7107
Email:	tanner.rickard@terraphase.com

Site Info

Address:	
City:	
Site Contact:	
Phone:	
2nd Site Contact:	
Phone:	

Request Completed By

Enthalpy Contact:	Diane Galvan
Date / Time:	2/18/19 @ 15:50

Date(s) Needed:		2/19/19			
Before:		After:	10:00am	Between:	
Assigned Field Technician:					
Arrival Time:			Leave Time:		
Pick Up	✓		**Delivery**		

Micro Sampling

1st Day:		Sampling Time:		# of samples:	
2nd Day:		Sampling Time:		# of samples:	
Verbal Notification required (ASAP):					
Primary Notification Contact Info:					
Secondary Notification Contact Info:					
Analysis:					

Water/Soil Sampling

ISCO:		Soil:		Water:	
Meter readings (ISCO):			# of samples:		
Analysis:					

Sampling Notes

TAT:		Return ASAP:		Return by:	
Comments/Instructions:					

Enthalpy Coordinator Use Only		Enthalpy PM Use Only	
Request Approved:		☑ Emailed ☐ Phoned ☐ No Notification	
Alternate Date/Time proposed:		Client contact notified:	Tanner Rickard
Request Denied:			
Name / Signature:		Name / Signature:	Diane Galvan
Date/Time:		Date/Time:	2/18/19 @ 15:50

Please initial and date any changes.

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Terraphase Engineering
Address: 18401 Von Karman Ave, Suite #410
Irvine, CA 92612

Attn: Clare Steedman

Comments: Hamilton High School
S030.008.003

Lab Request: 416244
Report Date: 06/20/2019
Date Received: 06/12/2019
Client ID: 15743

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID
416244-001	B53C - 5.0	416244-025	B57A - 10.0
416244-002	B53B - 5.0	416244-026	B57A - 15.0
416244-003	B53A - 5.0	416244-027	B57B - 10.0
416244-004	B53D - 5.0	416244-028	B57B - 15.0
416244-005	B53D - 10.0		
416244-006	B53D - 15.0		
416244-007	B53C - 10.0		
416244-008	B53C - 15.0		
416244-009	B53B - 10.0		
416244-010	B53B - 15.0		
416244-011	B53A - 10.0		
416244-012	B53A - 15.0		
416244-013	B57A - 5.0		
416244-014	B57A - 5.0 - DUP		
416244-015	B57D - 5.0		
416244-016	B57D - 5.0 - DUP		
416244-017	B57C - 5.0		
416244-018	B57B - 5.0		
416244-019	B57D - 10.0		
416244-020	B57D - 10.0 - DUP		
416244-021	B57D - 15.0		
416244-022	B57C - 10.0		
416244-023	B57C - 15.0		
416244-024	EB-01		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Diane M. Galvan

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 09:30 **Site:**
Sample #: 416244-001 **Client Sample #:** B53C - 5.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**12.2**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 09:43 **Site:**
Sample #: 416244-002 **Client Sample #:** B53B - 5.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**11.7**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 09:55 **Site:**
Sample #: 416244-003 **Client Sample #:** B53A - 5.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**13.0**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 10:16 **Site:**
Sample #: 416244-004 **Client Sample #:** B53D - 5.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**12.9**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 10:36 **Site:**
Sample #: 416244-005 **Client Sample #:** B53D - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**17.3**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203113		
Arsenic	**15.4**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 10:39 **Site:**
Sample #: 416244-006 **Client Sample #:** B53D - 15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**13.8**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 11:00 **Site:**
Sample #: 416244-007 **Client Sample #:** B53C - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203116		
Cobalt	**17.6**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203113		
Arsenic	**17.9**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 11:06 **Site:**
Sample #: 416244-008 **Client Sample #:** B53C - 15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203116		
Cobalt	**12.0**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 11:29 **Site:**
Sample #: 416244-009 **Client Sample #:** B53B - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203116		
Cobalt	**20.6**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**15.4**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 11:32 **Site:**
Sample #: 416244-010 **Client Sample #:** B53B - 15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203116		
Cobalt	**12.8**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 11:45 **Site:**
Sample #: 416244-011 **Client Sample #:** B53A - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203116		
Cobalt	**16.0**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**17.3**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 11:47 **Site:**
Sample #: 416244-012 **Client Sample #:** B53A - 15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**12.8**	1	0.19	0.5	mg/Kg	06/13/19	06/18/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 13:37 **Site:**
Sample #: 416244-013 **Client Sample #:** B57A - 5.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**14.2**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 13:37 **Site:**
Sample #: 416244-014 **Client Sample #:** B57A - 5.0 - DUP **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**15.2**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 13:18	**Site:**			
Sample #:	**416244-015**	**Client Sample #:**	B57D - 5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**15.5**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 13:18	**Site:**			
Sample #:	**416244-016**	**Client Sample #:**	B57D - 5.0 - DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**12.6**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 13:29	**Site:**			
Sample #:	**416244-017**	**Client Sample #:**	B57C - 5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**12.2**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 13:47	**Site:**			
Sample #:	**416244-018**	**Client Sample #:**	B57B - 5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**15.5**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 14:11	**Site:**			
Sample #:	**416244-019**	**Client Sample #:**	B57D - 10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**17.7**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203113		
Arsenic	**17.5**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 14:11	**Site:**			
Sample #:	**416244-020**	**Client Sample #:**	B57D - 10.0 - DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203113		
Arsenic	**20.0**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 14:14	**Site:**			
Sample #:	**416244-021**	**Client Sample #:**	B57D - 15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**13.2**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203163		
Arsenic	**155**	10	1.08	3	mg/Kg	06/14/19	06/17/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 14:22 **Site:**
Sample #: 416244-022 **Client Sample #:** B57C - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**15.6**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**16.7**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 14:25 **Site:**
Sample #: 416244-023 **Client Sample #:** B57C - 15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**14.6**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**11.1**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Water **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 14:30 **Site:**
Sample #: 416244-024 **Client Sample #:** EB-01 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3010A							QCBatchID: QC1203122		
Cobalt	ND	1	0.002	0.005	mg/L	06/13/19	06/14/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3010A							QCBatchID: QC1203269		
Arsenic	ND	1	0.31	2	ug/L	06/18/19	06/18/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 14:47 **Site:**
Sample #: 416244-025 **Client Sample #:** B57A - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**18.9**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**19.1**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 14:53 **Site:**
Sample #: 416244-026 **Client Sample #:** B57A - 15.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**12.9**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**11.8**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/12/2019 15:01 **Site:**
Sample #: 416244-027 **Client Sample #:** B57B - 10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203117		
Cobalt	**18.3**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1203113		
Arsenic	**18.4**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/12/2019 15:06	**Site:**			
Sample #:	**416244-028**	**Client Sample #:**	B57B - 15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203117		
Cobalt	**14.0**	1	0.19	0.5	mg/Kg	06/13/19	06/17/19	KLN	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203113		
Arsenic	**12.7**	1	0.108	0.3	mg/Kg	06/13/19	06/14/19	SBW	

QCBatchID:	**QC1203113**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203113MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Thallium	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203113LCS1											
Arsenic	50		49.7		mg/Kg	99			80-120		
Thallium	50		55.7		mg/Kg	111			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203113MS1, QC1203113MSD1												**Source: 416219-001**
Arsenic	6.08	50	50	46.2	49.4	mg/Kg	80	87	6.7	75-125	20	
Thallium	0.239	50	50	44.4	47.0	mg/Kg	88	94	5.7	75-125	20	

QCBatchID: QC1203116	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 06/13/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203116MB1					
Antimony	**0.99 J**	mg/Kg	0.37	3	
Arsenic	**0.77 J**	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	1	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	3	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	3	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203116LCS1											
Antimony	100		119		mg/Kg	119			80-120		
Arsenic	100		104		mg/Kg	104			80-120		
Barium	100		105		mg/Kg	105			80-120		
Beryllium	100		106		mg/Kg	106			80-120		
Cadmium	100		109		mg/Kg	109			80-120		
Chromium	100		107		mg/Kg	107			80-120		
Cobalt	100		113		mg/Kg	113			80-120		
Copper	100		97.0		mg/Kg	97			80-120		
Lead	100		108		mg/Kg	108			80-120		
Molybdenum	100		117		mg/Kg	117			80-120		
Nickel	100		111		mg/Kg	111			80-120		
Selenium	100		101		mg/Kg	101			80-120		
Silver	100		101		mg/Kg	101			80-120		
Thallium	100		112		mg/Kg	112			80-120		
Vanadium	100		110		mg/Kg	110			80-120		
Zinc	100		94.0		mg/Kg	94			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203116MS1, QC1203116MSD1												**Source: 416219-001**
Antimony	2.45	100	100	23.2	26.3	mg/Kg	21	24	12.5	75-125	20	M
Arsenic	8.09	100	100	106	106	mg/Kg	98	98	0.0	75-125	20	
Barium	153	100	100	244	236	mg/Kg	91	83	3.3	75-125	20	
Beryllium	ND	100	100	98.6	96.8	mg/Kg	99	97	1.8	75-125	20	
Cadmium	0.56	100	100	90.9	88.8	mg/Kg	90	88	2.3	75-125	20	
Chromium	26.7	100	100	119	117	mg/Kg	92	90	1.7	75-125	20	
Cobalt	13.3	100	100	106	103	mg/Kg	93	90	2.9	75-125	20	
Copper	26.3	100	100	113	112	mg/Kg	87	86	0.9	75-125	20	
Lead	8.37	100	100	102	104	mg/Kg	94	96	1.9	75-125	20	
Molybdenum	ND	100	100	101	102	mg/Kg	101	102	1.0	75-125	20	

QCBatchID: QC1203116	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 06/13/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203116MS1, QC1203116MSD1												**Source: 416219-001**
Nickel	19.6	100	100	115	117	mg/Kg	95	97	1.7	75-125	20	
Selenium	ND	100	100	91.1	87.0	mg/Kg	91	87	4.6	75-125	20	
Silver	ND	100	100	90.5	88.0	mg/Kg	91	88	2.8	75-125	20	
Thallium	2.30	100	100	99.9	98.4	mg/Kg	98	96	1.5	75-125	20	
Vanadium	46.3	100	100	147	145	mg/Kg	101	99	1.4	75-125	20	
Zinc	56.6	100	100	136	135	mg/Kg	79	78	0.7	75-125	20	

QCBatchID: QC1203117	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 06/13/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203117MB1					
Antimony	**0.71 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	1	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	3	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	3	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203117LCS1											
Antimony	100		118		mg/Kg	118			80-120		
Arsenic	100		105		mg/Kg	105			80-120		
Barium	100		97.3		mg/Kg	97			80-120		
Beryllium	100		101		mg/Kg	101			80-120		
Cadmium	100		102		mg/Kg	102			80-120		
Chromium	100		99.2		mg/Kg	99			80-120		
Cobalt	100		106		mg/Kg	106			80-120		
Copper	100		89.7		mg/Kg	90			80-120		
Lead	100		108		mg/Kg	108			80-120		
Molybdenum	100		114		mg/Kg	114			80-120		
Nickel	100		111		mg/Kg	111			80-120		
Selenium	100		99.0		mg/Kg	99			80-120		
Silver	100		95.5		mg/Kg	96			80-120		
Thallium	100		105		mg/Kg	105			80-120		
Vanadium	100		104		mg/Kg	104			80-120		
Zinc	100		116		mg/Kg	116			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203117MS1, QC1203117MSD1												**Source: 416244-012**
Antimony	1.07	100	100	25.9	27.8	mg/Kg	25	27	7.1	75-125	20	M
Arsenic	14.7	100	100	106	103	mg/Kg	91	88	2.9	75-125	20	
Barium	145	100	100	228	220	mg/Kg	83	75	3.6	75-125	20	
Beryllium	ND	100	100	96.7	94.2	mg/Kg	97	94	2.6	75-125	20	
Cadmium	1.45	100	100	87.3	87.7	mg/Kg	86	86	0.5	75-125	20	
Chromium	38.6	100	100	125	124	mg/Kg	86	85	0.8	75-125	20	
Cobalt	12.8	100	100	99.9	100	mg/Kg	87	87	0.1	75-125	20	
Copper	22.5	100	100	104	102	mg/Kg	82	80	1.9	75-125	20	
Lead	5.60	100	100	95.3	93.6	mg/Kg	90	88	1.8	75-125	20	
Molybdenum	ND	100	100	89.7	88.9	mg/Kg	90	89	0.9	75-125	20	

QCBatchID:	**QC1203117**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	06/13/2019	**Instrument:**	AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203117MS1, QC1203117MSD1												**Source: 416244-012**
Nickel	26.0	100	100	118	116	mg/Kg	92	90	1.7	75-125	20	
Selenium	ND	100	100	83.0	81.4	mg/Kg	83	81	1.9	75-125	20	
Silver	ND	100	100	81.4	80.8	mg/Kg	81	81	0.7	75-125	20	
Thallium	ND	100	100	84.3	84.4	mg/Kg	84	84	0.1	75-125	20	
Vanadium	65.7	100	100	157	155	mg/Kg	91	89	1.3	75-125	20	
Zinc	69.0	100	100	172	165	mg/Kg	103	96	4.2	75-125	20	

QCBatchID:	**QC1203122**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Water	**Analyzed:**	06/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203122MB1					
Cobalt	ND	mg/L	0.002	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203122LCS1											
Cobalt	2		2.08		mg/L	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203122MS1, QC1203122MSD1												**Source: 416244-024**
Cobalt	ND	1	1	1.02	1.01	mg/L	102	101	1.0	75-125	20	

QCBatchID: QC1203163	Analyst: dswafford	Method: EPA 6020
Matrix: Solid	Analyzed: 06/14/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203163MB1					
Antimony	**0.984**	mg/Kg	0.282	0.5	B
Arsenic	ND	mg/Kg	0.108	0.3	
Barium	ND	mg/Kg	0.209	0.5	
Beryllium	ND	mg/Kg	0.16	0.5	
Cadmium	ND	mg/Kg	0.141	0.5	
Chromium	ND	mg/Kg	0.372	0.5	
Cobalt	ND	mg/Kg	0.13	0.5	
Copper	ND	mg/Kg	0.181	0.5	
Lead	ND	mg/Kg	0.128	0.5	
Molybdenum	**0.288 J**	mg/Kg	0.125	0.5	
Nickel	ND	mg/Kg	0.381	0.5	
Selenium	ND	mg/Kg	0.199	0.5	
Silver	ND	mg/Kg	0.136	0.5	
Thallium	ND	mg/Kg	0.128	0.5	
Vanadium	ND	mg/Kg	0.155	0.5	
Zinc	ND	mg/Kg	0.756	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203163LCS1											
Antimony	50		56.3		mg/Kg	113			80-120		
Arsenic	50		54.5		mg/Kg	109			80-120		
Barium	50		56.1		mg/Kg	112			80-120		
Beryllium	50		78.2		mg/Kg	156			80-120		L
Cadmium	50		56.0		mg/Kg	112			80-120		
Chromium	50		52.0		mg/Kg	104			80-120		
Cobalt	50		51.1		mg/Kg	102			80-120		
Copper	50		51.0		mg/Kg	102			80-120		
Lead	50		55.1		mg/Kg	110			80-120		
Molybdenum	50		53.6		mg/Kg	107			80-120		
Nickel	50		51.8		mg/Kg	104			80-120		
Selenium	50		56.5		mg/Kg	113			80-120		
Silver	50		52.5		mg/Kg	105			80-120		
Thallium	50		52.8		mg/Kg	106			80-120		
Vanadium	50		53.7		mg/Kg	107			80-120		
Zinc	50		56.6		mg/Kg	113			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203163MS1, QC1203163MSD1												**Source: 416291-001**
Antimony	ND	50	50	8.24	8.24	mg/Kg	16	16	0.0	75-125	20	M
Arsenic	3.70	50	50	52.9	51.3	mg/Kg	98	95	3.1	75-125	20	
Barium	121	50	50	176	175	mg/Kg	110	108	0.6	75-125	20	
Beryllium	ND	50	50	80.6	80.6	mg/Kg	161	161	0.0	75-125	20	M
Cadmium	0.217	50	50	55.7	55.0	mg/Kg	111	110	1.3	75-125	20	
Chromium	20.7	50	50	71.0	72.0	mg/Kg	101	103	1.4	75-125	20	
Cobalt	8.53	50	50	53.1	52.2	mg/Kg	89	87	1.7	75-125	20	
Copper	28.7	50	50	74.9	73.9	mg/Kg	92	90	1.3	75-125	20	
Lead	13.6	50	50	66.3	64.2	mg/Kg	105	101	3.2	75-125	20	
Molybdenum	0.443	50	50	51.1	50.8	mg/Kg	101	101	0.6	75-125	20	

QCBatchID: QC1203163	Analyst: dswafford	Method: EPA 6020
Matrix: Solid	Analyzed: 06/14/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203163MS1, QC1203163MSD1												**Source: 416291-001**
Nickel	15.0	50	50	60.8	59.1	mg/Kg	92	88	2.8	75-125	20	
Selenium	ND	50	50	50.4	48.9	mg/Kg	101	98	3.0	75-125	20	
Silver	ND	50	50	48.0	48.1	mg/Kg	96	96	0.2	75-125	20	
Thallium	0.214	50	50	50.5	50.0	mg/Kg	101	100	1.0	75-125	20	
Vanadium	36.4	50	50	89.1	90.6	mg/Kg	105	108	1.7	75-125	20	
Zinc	186	50	50	223	211	mg/Kg	74	50	5.5	75-125	20	M

QCBatchID:	**QC1203269**	**Analyst:**	sbailey-woo	**Method:**	EPA 6020
Matrix:	Water	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203269MB1					
Arsenic	ND	ug/L	0.31	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203269LCS1											
Arsenic	50		47.6		ug/L	95			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203269MS1, QC1203269MSD1												**Source: 416244-024**
Arsenic	ND	50	50	47.2	46.3	ug/L	94	93	1.9	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave., Orange, CA 92868 Phone: (714) 771-6900 Fax: (714) 538-1209	Lab No: 416244 Page: 1 of 3	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B53C-5.0	6/12/19	0930	S	1x8oz Jar	Ice				X							
B53B-5.0		0943							X							
B53A-5.0		0955							X							
B53D-5.0		1016							X							
B53D-10.0		1036							X	X						
B53D-15.0		1039							X							
B53C-10.0		1100							X	X						
B53C-15.0		1106							X							
B53B-10.0		1129							X	X						
B53B-15.0	6/12/19	1132	S	1x8oz Jar	Ice				X							

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	John Mitchell	Tanner Rickard	Terraphase / Geologist	6/12/19 1520
1 Received By:	[illegible]	Hao Tran	Enthalpy	6/12/19 1520
2 Relinquished By:	[illegible]	Hao Tran	"	6/12/19 1730
2 Received By:	[illegible]	Lea Fatherman	EA	06/12/19 1730
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave., Orange, CA 92868	Lab No: 416244	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714) 538-1209	Page: 2 of 3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
1 Park Plaza, Suite 1000, Irvine, CA 92614							

ENTHALPY analytical, inc.

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Analysis Request / **Test Instructions / Comments**

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
JR 6/12/19																
~~B53B-10.0~~ B53A-10.0	6/12/19	1145	S	1x8oz Jar	Ice				X	X						
B53A-15.0	↓	1147	↓	↓	↓				X							
B57A-5.0	↓	1337	↓	1x8oz Jar	↓				X							
B57A-5.0-DUP	6/12/19	1337	S	1x8oz Jar	Ice				X							
~~B57B-5.0~~		~~1318~~							~~X~~							
~~B57B-5.0-DUP~~		~~1318~~							~~X~~							
B57D-5.0	6/12/19	1318	S	1x8oz Jar	Ice				X							
B57D-5.0-DUP	↓	1318	↓	↓	↓				X							
B57C-5.0	↓	1329	↓	↓	↓				X							
B57B-5.0	6/12/19	1347	S	1x8oz Jar	Ice				X							

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/12/19 1520
1 Received By:	[signature]	Hao Tran	Enthalpy	6/12/19 1520
2 Relinquished By:	[signature]	Hao Tran	"	6/12/19 1730
2 Received By:	[signature]	Lakatherman	EA	06/12/19 1730
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave., Orange, CA 92868 Phone: (714) 771-6900 Fax: (714) 538-1209	Lab No: 416244 Page: 3 of 3	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B57D-10.0	6/12/19	1411	S	1x8oz Jar	Ice				X	X						
B57D-10.0-DUP		1411								X						
B57D-15.0		1414							X	X						
B57C-10.0		1422	S						X	X						
B57C-15.0		1425	S	1x8oz Jar	Ice				X	X						
EB-01		1430	W	1x40mL poly	3				X	X						
B57A-10.0		1447	S	1x8oz Jar	Ice				X	X						
B57A-15.0		1453							X	X						
B57B-10.0		1501							X	X						
B57B-15.0	6/12/19	1506	S	1x8oz Jar	Ice				X	X						

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	Terraphase / Geologist	6/12/19 1520
1 Received By:	[illegible]	Jesus Tran	Enthalpy	6/12/19 1520
2 Relinquished By:	[illegible]	Jesus Tran	"	6/12/19 1730
2 Received By:	[illegible]	Katherman	EA	06/12/19 1730
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Project: Hamilton HS

Date Received: 6/12/19 Sampler's Name Present: [X] Yes [ ] No

Section 2

Sample(s) received in a cooler? [✓] Yes, How many? 1 [ ] No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 7.5 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: [✓] Ice [ ] Ice Packs [ ] Bubble Wrap [ ] Styrofoam [ ] Paper [ ] None [ ] Other _____

Cooler Temp (°C): #1: 3.7 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? [ ] Verbal PM Initials: _____ Date/Time _____

[ ] Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: [signature] Date: 06/12/19

Enthalpy Analytical Field Technician Request Form

Version # 2.7
Effective 9/10/15

Client Info

Client Name:	Terraphase Engineering
Address:	18401 Von Karman Avenue, Suite 410
City:	Irvine, CA 92612
Ordered By:	Wes Skillings
Client Project Manager:	
Phone:	(o) 949-377-2227 x 128 (c) 520-668-2968
Email:	wes.skillings@terraphase.com

Site Info

Address:	Hamilton High School 2955 South Robertson Blvd
City:	Los Angeles, CA 90034
Site Contact:	Wes Skillings
Phone:	520-668-2968
2nd Site Contact:	Tanner Rickard
Phone:	310-971-7107

Request Completed By

Enthalpy Contact:	Diane Galvan
Date / Time:	6/11/19 @ 11:35

Date(s) Needed:	6/12/19 @ 3:45pm				
Before:		After:		Between:	
Assigned Field Technician:					
Arrival Time:			Leave Time:		
Pick Up	✔		**Delivery**		

Micro Sampling

1st Day:		Sampling Time:		# of samples:	
2nd Day:		Sampling Time:		# of samples:	
Verbal Notification required (ASAP):					
Primary Notification Contact Info:					
Secondary Notification Contact Info:					
Analysis:					

Water/Soil Sampling

ISCO:		Soil:		Water:	
Meter readings (ISCO):			# of samples:		
Analysis:					

Sampling Notes

TAT:		Return ASAP:		Return by:	

Comments/Instructions:

Enthalpy Coordinator Use Only		Enthalpy PM Use Only	
Request Approved:		☐ Emailed ☑ Phoned ☐ No Notification	
Alternate Date/Time proposed:		Client contact notified:	Wes Skillings
Request Denied:			
Name / Signature:		Name / Signature:	Diane Galvan
Date/Time:		Date/Time:	6/11/19 @ 11:30

Please initial and date any changes.

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Terraphase Engineering
Address: 18401 Von Karman Ave, Suite #410
Irvine, CA 92612

Attn: Clare Steedman

Comments: Hamilton High School
S030.008.003

Lab Request: 416293
Report Date: 06/21/2019
Date Received: 06/13/2019
Client ID: 15743

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
416293-001	B61B-10.0	416293-033	B91B-1.5	416293-058	B94-1.5
416293-002	B61B-10.0-DUP	416293-034	B91C-1.5	416293-059	B94-2.5
416293-003	B61A-10.0	416293-035	B70B-0.5	416293-060	B95-0.5
416293-004	B20A-0.5	416293-036	B70A-0.5	416293-061	B95-1.5
416293-005	B20A-0.5-DUP	416293-038	B70B-1.5	416293-062	B95-2.5
416293-006	B20B-0.5	416293-039	B70A-1.5	416293-063	B96-0.5
416293-007	B20C-0.5	416293-040	B10A-0.5	416293-064	B96-1.5
416293-008	B20D-0.5	416293-041	B10A-0.5-DUP	416293-065	B96-2.5
416293-009	B11C-1.5	416293-042	B10B-0.5	416293-066	B97-0.5
416293-010	B11A-1.5	416293-043	B10C-0.5	416293-067	B97-1.5
416293-011	B11A-1.5-DUP	416293-044	B25A-0.5	416293-068	B97-2.5
416293-012	B11A-2.5	416293-045	B25A-0.5-DUP	416293-069	EB-02
416293-013	B11C-2.5	416293-046	B25D-0.5		
416293-016	B11B-1.5	416293-047	B25C-0.5		
416293-017	B11D-1.5	416293-048	B25B-0.5		
416293-018	B11B-2.5	416293-049	B12C-0.5		
416293-020	B11D-2.5	416293-050	B12D-0.5		
416293-022	B18B-2.5	416293-051	B12A-0.5		
416293-023	B18B-2.5-DUP	416293-052	B12A-0.5-DUP		
416293-025	B18D-2.5	416293-053	B12B-0.5		
416293-027	B18C-2.5	416293-054	B03C-1.5		
416293-029	B18A-2.5	416293-055	B03B-1.5		
416293-031	B91A-1.5	416293-056	B03A-1.5		
416293-032	B91A-1.5-DUP	416293-057	B94-0.5		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Patricia Mata, PM

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 07:31 **Site:**
Sample #: 416293-001 **Client Sample #:** B61B-10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203270		
Cobalt	**13.8**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**17.9**	2	0.216	0.6	mg/Kg	06/18/19	06/20/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 07:31 **Site:**
Sample #: 416293-002 **Client Sample #:** B61B-10.0-DUP **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203270		
Cobalt	**11.4**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**15.4**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 07:47 **Site:**
Sample #: 416293-003 **Client Sample #:** B61A-10.0 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203270		
Cobalt	**16.9**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**16.8**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 08:12 **Site:**
Sample #: 416293-004 **Client Sample #:** B20A-0.5 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**4.84**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 08:12 **Site:**
Sample #: 416293-005 **Client Sample #:** B20A-0.5-DUP **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**17.5**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 08:11 **Site:**
Sample #: 416293-006 **Client Sample #:** B20B-0.5 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**88.9**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid **Client:** Terraphase Engineering **Collector:** Client
Sampled: 06/13/2019 08:14 **Site:**
Sample #: 416293-007 **Client Sample #:** B20C-0.5 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**22.8**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:16	Site:			
Sample #:	**416293-008**	Client Sample #:	B20D-0.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**5.44**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:31	Site:			
Sample #:	**416293-009**	Client Sample #:	B11C-1.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**87.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:34	Site:			
Sample #:	**416293-010**	Client Sample #:	B11A-1.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**3.93**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:34	Site:			
Sample #:	**416293-011**	Client Sample #:	B11A-1.5-DUP	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**9.12**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:36	Site:			
Sample #:	**416293-012**	Client Sample #:	B11A-2.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**15.9**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:36	Site:			
Sample #:	**416293-013**	Client Sample #:	B11C-2.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**29.3**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:47	Site:			
Sample #:	**416293-016**	Client Sample #:	B11B-1.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**26.6**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	Client:	Terraphase Engineering	Collector:	Client
Sampled:	06/13/2019 08:50	Site:			
Sample #:	**416293-017**	Client Sample #:	B11D-1.5	Sample Type:	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**36.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 08:51	Site:	
Sample #: **416293-018**	Client Sample #: B11B-2.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**40.2**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 09:01	Site:	
Sample #: **416293-020**	Client Sample #: B11D-2.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203274		
Arsenic	**16.5**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 09:30	Site:	
Sample #: **416293-022**	Client Sample #: B18B-2.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Arsenic	**13.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 09:30	Site:	
Sample #: **416293-023**	Client Sample #: B18B-2.5-DUP	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Arsenic	**13.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 09:35	Site:	
Sample #: **416293-025**	Client Sample #: B18D-2.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Arsenic	**14.7**	2	0.216	0.6	mg/Kg	06/18/19	06/20/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 09:43	Site:	
Sample #: **416293-027**	Client Sample #: B18C-2.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Arsenic	**13.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 09:50	Site:	
Sample #: **416293-029**	Client Sample #: B18A-2.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Arsenic	**13.4**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	

Matrix: Solid	Client: Terraphase Engineering	Collector: Client
Sampled: 06/13/2019 10:08	Site:	
Sample #: **416293-031**	Client Sample #: B91A-1.5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Lead	**19.1**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:08	**Site:**			
Sample #:	**416293-032**	**Client Sample #:**	B91A-1.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Lead	**13.7**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:14	**Site:**			
Sample #:	**416293-033**	**Client Sample #:**	B91B-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Lead	**162**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:07	**Site:**			
Sample #:	**416293-034**	**Client Sample #:**	B91C-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203275		
Lead	**6.84**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:36	**Site:**			
Sample #:	**416293-035**	**Client Sample #:**	B70B-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203270	
Antimony	**0.72 J**	1	0.37	3	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Arsenic	**4.31**	1	0.36	1	mg/Kg	06/18/19	06/18/19	KLN	
Barium	**33.6**	1	0.23	1	mg/Kg	06/18/19	06/18/19	KLN	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Cadmium	**0.32 J**	1	0.21	0.5	mg/Kg	06/18/19	06/18/19	KLN	J
Chromium	**7.37**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	
Cobalt	**2.98**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Copper	**8.95**	1	0.31	1	mg/Kg	06/18/19	06/18/19	KLN	
Lead	**8.52**	1	0.32	1	mg/Kg	06/18/19	06/18/19	KLN	
Molybdenum	**0.62 J**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Nickel	**4.32**	1	0.2	1.5	mg/Kg	06/18/19	06/18/19	KLN	
Selenium	**3.23**	1	0.72	3	mg/Kg	06/18/19	06/18/19	KLN	
Silver	ND	1	0.13	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Thallium	ND	1	0.42	3	mg/Kg	06/18/19	06/18/19	KLN	
Vanadium	**12.9**	1	0.37	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Zinc	**55.2**	1	0.28	5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203427	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	**3.6 J**	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	J
4,4'-DDE	**19**	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*96*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*71*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:38	**Site:**			
Sample #:	**416293-036**	**Client Sample #:**	B70A-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203270	
Antimony	**0.40 J**	1	0.37	3	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Arsenic	**3.81**	1	0.36	1	mg/Kg	06/18/19	06/18/19	KLN	
Barium	**31.7**	1	0.23	1	mg/Kg	06/18/19	06/18/19	KLN	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Cadmium	**0.38 J**	1	0.21	0.5	mg/Kg	06/18/19	06/18/19	KLN	J
Chromium	**8.10**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	
Cobalt	**2.92**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Copper	**7.82**	1	0.31	1	mg/Kg	06/18/19	06/18/19	KLN	
Lead	**14.6**	1	0.32	1	mg/Kg	06/18/19	06/18/19	KLN	
Molybdenum	**0.73 J**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Nickel	**4.87**	1	0.2	1.5	mg/Kg	06/18/19	06/18/19	KLN	
Selenium	**1.45 J**	1	0.72	3	mg/Kg	06/18/19	06/18/19	KLN	J
Silver	ND	1	0.13	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Thallium	ND	1	0.42	3	mg/Kg	06/18/19	06/18/19	KLN	
Vanadium	**12.5**	1	0.37	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Zinc	**67.6**	1	0.28	5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203427	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	**19**	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*78*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*57*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203240	
PCB-1016	ND	1	3	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/17/19	06/18/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:38	**Site:**			
Sample #:	**416293-036**	**Client Sample #:**	B70A-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*76*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:39	**Site:**			
Sample #:	**416293-038**	**Client Sample #:**	B70B-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1203270
Antimony	**1.51 J**	1	0.37	3	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Arsenic	**34.9**	1	0.36	1	mg/Kg	06/18/19	06/18/19	KLN	
Barium	**134**	1	0.23	1	mg/Kg	06/18/19	06/18/19	KLN	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Cadmium	**2.15**	1	0.21	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Chromium	**38.7**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	
Cobalt	**13.2**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Copper	**27.5**	1	0.31	1	mg/Kg	06/18/19	06/18/19	KLN	
Lead	**14.2**	1	0.32	1	mg/Kg	06/18/19	06/18/19	KLN	
Molybdenum	**2.10**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	
Nickel	**31.7**	1	0.2	1.5	mg/Kg	06/18/19	06/18/19	KLN	
Selenium	ND	1	0.72	3	mg/Kg	06/18/19	06/18/19	KLN	
Silver	ND	1	0.13	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Thallium	**1.15 J**	1	0.42	3	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Vanadium	**69.1**	1	0.37	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Zinc	**81.3**	1	0.28	5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 7471A *NELAC*	Prep Method: EPA 7471A						QCBatchID:		QC1203427
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID:		QC1203239
4,4'-DDD	ND	2	4.2	10	ug/Kg	06/17/19	06/18/19	SS	D2
4,4'-DDE	ND	2	4	10	ug/Kg	06/17/19	06/18/19	SS	D2
4,4'-DDT	ND	2	4	10	ug/Kg	06/17/19	06/18/19	SS	D2
a-BHC	ND	2	3.2	10	ug/Kg	06/17/19	06/18/19	SS	D2
Aldrin	ND	2	3	10	ug/Kg	06/17/19	06/18/19	SS	D2
b-BHC	ND	2	3	10	ug/Kg	06/17/19	06/18/19	SS	D2
Chlordane (technical)	ND	2	70	100	ug/Kg	06/17/19	06/18/19	SS	D2
d-BHC	ND	2	2.4	10	ug/Kg	06/17/19	06/18/19	SS	D2
Dieldrin	ND	2	4.2	10	ug/Kg	06/17/19	06/18/19	SS	D2
Endosulfan I	ND	2	2.4	10	ug/Kg	06/17/19	06/18/19	SS	D2
Endosulfan II	ND	2	5.6	10	ug/Kg	06/17/19	06/18/19	SS	D2
Endosulfan sulfate	ND	2	6.8	10	ug/Kg	06/17/19	06/18/19	SS	D2
Endrin	ND	2	5.4	10	ug/Kg	06/17/19	06/18/19	SS	D2
Endrin aldehyde	ND	2	4.2	10	ug/Kg	06/17/19	06/18/19	SS	D2
Endrin Ketone	ND	2	8.2	10	ug/Kg	06/17/19	06/18/19	SS	D2
Heptachlor	ND	2	2.6	10	ug/Kg	06/17/19	06/18/19	SS	D2
Heptachlor epoxide	ND	2	4.6	10	ug/Kg	06/17/19	06/18/19	SS	D2
Lindane (Gamma-BHC)	ND	2	4	10	ug/Kg	06/17/19	06/18/19	SS	D2
Methoxychlor	ND	2	18.4	20	ug/Kg	06/17/19	06/18/19	SS	D2
Toxaphene	ND	2	108	200	ug/Kg	06/17/19	06/18/19	SS	D2

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*104*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*89*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 10:41	**Site:**			
Sample #:	**416293-039**	**Client Sample #:**	B70A-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1203270	
Antimony	**3.20**	1	0.37	3	mg/Kg	06/18/19	06/18/19	KLN	
Arsenic	**16.3**	1	0.36	1	mg/Kg	06/18/19	06/18/19	KLN	
Barium	**94.5**	1	0.23	1	mg/Kg	06/18/19	06/18/19	KLN	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Cadmium	**1.05**	1	0.21	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Chromium	**29.6**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	
Cobalt	**9.06**	1	0.19	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Copper	**19.0**	1	0.31	1	mg/Kg	06/18/19	06/18/19	KLN	
Lead	**13.2**	1	0.32	1	mg/Kg	06/18/19	06/18/19	KLN	
Molybdenum	**0.16 J**	1	0.13	1	mg/Kg	06/18/19	06/18/19	KLN	B1,J
Nickel	**19.2**	1	0.2	1.5	mg/Kg	06/18/19	06/18/19	KLN	
Selenium	ND	1	0.72	3	mg/Kg	06/18/19	06/18/19	KLN	
Silver	ND	1	0.13	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Thallium	ND	1	0.42	3	mg/Kg	06/18/19	06/18/19	KLN	
Vanadium	**51.2**	1	0.37	0.5	mg/Kg	06/18/19	06/18/19	KLN	
Zinc	**54.4**	1	0.28	5	mg/Kg	06/18/19	06/18/19	KLN	
Method: EPA 7471A *NELAC*	Prep Method: EPA 7471A						QCBatchID:	QC1203427	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*89*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*69*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 11:18	**Site:**			
Sample #:	**416293-040**	**Client Sample #:**	B10A-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1203275	
Lead	**17.9**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 11:18	**Site:**			
Sample #:	**416293-041**	**Client Sample #:**	B10A-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**15.7**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 11:20	**Site:**			
Sample #:	**416293-042**	**Client Sample #:**	B10B-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**7.56**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 11:21	**Site:**			
Sample #:	**416293-043**	**Client Sample #:**	B10C-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**21.7**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:16	**Site:**			
Sample #:	**416293-044**	**Client Sample #:**	B25A-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**24.7**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:16	**Site:**			
Sample #:	**416293-045**	**Client Sample #:**	B25A-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**17.9**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:20	**Site:**			
Sample #:	**416293-046**	**Client Sample #:**	B25D-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**186**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:22	**Site:**			
Sample #:	**416293-047**	**Client Sample #:**	B25C-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**194**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:25	**Site:**			
Sample #:	**416293-048**	**Client Sample #:**	B25B-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**80.2**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:37	**Site:**			
Sample #:	**416293-049**	**Client Sample #:**	B12C-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**336**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:36	**Site:**			
Sample #:	**416293-050**	**Client Sample #:**	B12D-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**412**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:41	**Site:**			
Sample #:	**416293-051**	**Client Sample #:**	B12A-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**136**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:41	**Site:**			
Sample #:	**416293-052**	**Client Sample #:**	B12A-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**131**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:47	**Site:**			
Sample #:	**416293-053**	**Client Sample #:**	B12B-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**132**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:52	**Site:**			
Sample #:	**416293-054**	**Client Sample #:**	B03C-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**105**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:00	**Site:**			
Sample #:	**416293-055**	**Client Sample #:**	B03B-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**23.7**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 12:57	**Site:**			
Sample #:	**416293-056**	**Client Sample #:**	B03A-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1203299		
Lead	**7.38**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:17	**Site:**			
Sample #:	**416293-057**	**Client Sample #:**	B94-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203299	
Arsenic	**11.9**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.19**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*92*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*74*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:21	**Site:**			
Sample #:	**416293-058**	**Client Sample #:**	B94-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203299	
Arsenic	**12.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**6.82**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*98*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*76*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:24	**Site:**			
Sample #:	**416293-059**	**Client Sample #:**	B94-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203299	
Arsenic	**12.9**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**6.42**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*93*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*75*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:33	**Site:**			
Sample #:	**416293-060**	**Client Sample #:**	B95-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203299	
Arsenic	**12.4**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**10.3**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*96*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*70*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:37	**Site:**			
Sample #:	**416293-061**	**Client Sample #:**	B95-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**11.6**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.09**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*95*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*73*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:40	**Site:**			
Sample #:	**416293-062**	**Client Sample #:**	B95-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**11.0**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**6.43**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*97*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*66*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:51	**Site:**			
Sample #:	**416293-063**	**Client Sample #:**	B96-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**2.48**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**29.6**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*84*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*69*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:54	**Site:**			
Sample #:	**416293-064**	**Client Sample #:**	B96-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**10.2**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**14.4**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*91*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*72*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 13:56	**Site:**			
Sample #:	**416293-065**	**Client Sample #:**	B96-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**12.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**11.5**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*87*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*72*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 14:03	**Site:**			
Sample #:	**416293-066**	**Client Sample #:**	B97-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**1.297**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**5.49**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*86*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*67*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 14:05	**Site:**			
Sample #:	**416293-067**	**Client Sample #:**	B97-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**6.95**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**5.62**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*81*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*67*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 14:11	**Site:**			
Sample #:	**416293-068**	**Client Sample #:**	B97-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**12.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**6.99**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203239	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*92*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*77*	*50-150*	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 14:29	**Site:**			
Sample #:	**416293-069**	**Client Sample #:**	EB-02	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3010A							QCBatchID:	QC1203159	
Antimony	ND	1	0.014	0.04	mg/L	06/14/19	06/14/19	KLN	
Barium	ND	1	0.002	0.01	mg/L	06/14/19	06/14/19	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	06/14/19	06/14/19	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	06/14/19	06/14/19	KLN	
Chromium	ND	1	0.002	0.01	mg/L	06/14/19	06/14/19	KLN	
Cobalt	ND	1	0.001	0.005	mg/L	06/14/19	06/14/19	KLN	
Copper	**0.005 J**	1	0.004	0.01	mg/L	06/14/19	06/18/19	KLN	B1,J
Molybdenum	ND	1	0.005	0.01	mg/L	06/14/19	06/18/19	KLN	
Nickel	ND	1	0.003	0.02	mg/L	06/14/19	06/14/19	KLN	
Selenium	ND	1	0.016	0.03	mg/L	06/14/19	06/14/19	KLN	
Silver	ND	1	0.003	0.005	mg/L	06/14/19	06/21/19	KLN	
Thallium	**0.014 J**	1	0.009	0.05	mg/L	06/14/19	06/18/19	KLN	B1,J
Vanadium	**0.006**	1	0.002	0.005	mg/L	06/14/19	06/14/19	KLN	
Zinc	**0.011 J**	1	0.007	0.05	mg/L	06/14/19	06/14/19	KLN	J
Method: EPA 6020 *NELAC* Prep Method: EPA 3010A							QCBatchID:	QC1203360	
Arsenic	ND	1	0.31	2	ug/L	06/19/19	06/20/19	SBW	
Lead	ND	1	0.76	5	ug/L	06/19/19	06/20/19	SBW	
Method: EPA 7470A *NELAC* Prep Method: Method							QCBatchID:	QC1203173	
Mercury	ND	1	0.094	0.4	ug/L	06/14/19	06/14/19	JP	
Method: EPA 8081A *NELAC* Prep Method: EPA 3510C							QCBatchID:	QC1203179	
4,4'-DDD	ND	1	0.011	0.1	ug/L	06/14/19	06/14/19	SS	
4,4'-DDE	ND	1	0.006	0.1	ug/L	06/14/19	06/14/19	SS	
4,4'-DDT	ND	1	0.011	0.1	ug/L	06/14/19	06/14/19	SS	
a-BHC	ND	1	0.002	0.1	ug/L	06/14/19	06/14/19	SS	
Aldrin	ND	1	0.007	0.1	ug/L	06/14/19	06/14/19	SS	
b-BHC	ND	1	0.003	0.1	ug/L	06/14/19	06/14/19	SS	
Chlordane (technical)	ND	1	0.27	1	ug/L	06/14/19	06/14/19	SS	
d-BHC	ND	1	0.006	0.1	ug/L	06/14/19	06/14/19	SS	
Dieldrin	ND	1	0.006	0.1	ug/L	06/14/19	06/14/19	SS	
Endosulfan I	ND	1	0.004	0.1	ug/L	06/14/19	06/14/19	SS	
Endosulfan II	ND	1	0.011	0.1	ug/L	06/14/19	06/14/19	SS	
Endosulfan sulfate	ND	1	0.012	0.1	ug/L	06/14/19	06/14/19	SS	
Endrin	ND	1	0.008	0.1	ug/L	06/14/19	06/14/19	SS	
Endrin aldehyde	ND	1	0.009	0.1	ug/L	06/14/19	06/14/19	SS	
Endrin Ketone	ND	1	0.011	0.1	ug/L	06/14/19	06/14/19	SS	
Heptachlor	ND	1	0.003	0.1	ug/L	06/14/19	06/14/19	SS	
Heptachlor epoxide	ND	1	0.002	0.1	ug/L	06/14/19	06/14/19	SS	
Lindane (Gamma-BHC)	ND	1	0.002	0.1	ug/L	06/14/19	06/14/19	SS	
Methoxychlor	ND	1	0.055	0.1	ug/L	06/14/19	06/14/19	SS	
Toxaphene	ND	1	0.48	2	ug/L	06/14/19	06/14/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*79*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*69*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3510C							QCBatchID:	QC1203180	
PCB-1016	ND	1	0.058	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1221	ND	1	0.253	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1232	ND	1	0.196	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1242	ND	1	0.169	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1248	ND	1	0.1	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1254	ND	1	0.054	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1260	ND	1	0.08	0.5	ug/L	06/14/19	06/14/19	SS	
PCB-1262	ND	1	0.045	0.5	ug/L	06/14/19	06/14/19	SS	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/13/2019 14:29	**Site:**			
Sample #:	**416293-069**	**Client Sample #:**	EB-02	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
PCB-1268	ND	1	0.062	0.5	ug/L	06/14/19	06/14/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*76*	*50-150*	

QCBatchID: QC1203159	Analyst: dswafford	Method: EPA 6010B
Matrix: Water	Analyzed: 06/14/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203159MB1					
Antimony	ND	mg/L	0.014	0.04	
Arsenic	ND	mg/L	0.008	0.01	
Barium	ND	mg/L	0.002	0.01	
Beryllium	ND	mg/L	0.001	0.005	
Cadmium	ND	mg/L	0.001	0.005	
Chromium	ND	mg/L	0.002	0.01	
Cobalt	ND	mg/L	0.001	0.005	
Copper	**0.006 J**	mg/L	0.004	0.01	
Lead	ND	mg/L	0.005	0.01	
Molybdenum	**0.0058 J**	mg/L	0.005	0.01	
Nickel	ND	mg/L	0.003	0.02	
Selenium	ND	mg/L	0.016	0.03	
Silver	ND	mg/L	0.003	0.005	
Thallium	**0.036 J**	mg/L	0.009	0.05	
Vanadium	ND	mg/L	0.002	0.005	
Zinc	ND	mg/L	0.007	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203159LCS1											
Antimony	2		2.07		mg/L	104			80-120		
Arsenic	2		1.98		mg/L	99			80-120		
Barium	2		1.93		mg/L	97			80-120		
Beryllium	2		2.04		mg/L	102			80-120		
Cadmium	2		1.99		mg/L	100			80-120		
Chromium	2		1.94		mg/L	97			80-120		
Cobalt	2		2.06		mg/L	103			80-120		
Copper	2		1.85		mg/L	93			80-120		
Lead	2		2.12		mg/L	106			80-120		
Molybdenum	2		2.16		mg/L	108			80-120		
Nickel	2		2.00		mg/L	100			80-120		
Selenium	2		1.95		mg/L	98			80-120		
Silver	2		1.89		mg/L	95			80-120		
Thallium	2		2.07		mg/L	104			80-120		
Vanadium	2		2.08		mg/L	104			80-120		
Zinc	2		1.98		mg/L	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203159MS1, QC1203159MSD1												**Source: 416293-069**
Antimony	ND	1	1	1.18	1.18	mg/L	118	118	0.0	75-125	20	
Arsenic	ND	1	1	1.01	0.981	mg/L	101	98	2.9	75-125	20	
Barium	ND	1	1	1.01	0.984	mg/L	101	98	2.6	75-125	20	
Beryllium	ND	1	1	0.999	0.989	mg/L	100	99	1.0	75-125	20	
Cadmium	ND	1	1	1.04	1.01	mg/L	104	101	2.9	75-125	20	
Chromium	ND	1	1	1.01	0.973	mg/L	101	97	3.7	75-125	20	
Cobalt	ND	1	1	1.07	1.04	mg/L	107	104	2.8	75-125	20	
Copper	0.005	1	1	0.991	0.928	mg/L	99	92	6.6	75-125	20	
Lead	0.005	1	1	1.06	1.07	mg/L	106	107	0.9	75-125	20	
Molybdenum	ND	1	1	1.16	1.17	mg/L	116	117	0.9	75-125	20	

QCBatchID: QC1203159	Analyst: dswafford	Method: EPA 6010B
Matrix: Water	Analyzed: 06/14/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203159MS1, QC1203159MSD1												**Source: 416293-069**
Nickel	ND	1	1	1.11	1.11	mg/L	111	111	0.0	75-125	20	
Selenium	ND	1	1	0.967	0.973	mg/L	97	97	0.6	75-125	20	
Silver	ND	1	1	0.983	0.951	mg/L	98	95	3.3	75-125	20	
Thallium	0.014	1	1	1.07	1.09	mg/L	106	108	1.9	75-125	20	
Vanadium	0.006	1	1	1.07	1.04	mg/L	106	103	2.8	75-125	20	
Zinc	0.011	1	1	1.09	1.09	mg/L	108	108	0.0	75-125	20	

QCBatchID:	**QC1203173**	**Analyst:**	cmorales	**Method:**	EPA 7470A
Matrix:	Water	**Analyzed:**	06/14/2019	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203173MB1					
Mercury	ND	ug/L	0.094	0.4	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203173LCS1											
Mercury	5		5.09		ug/L	102			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203173MS1, QC1203173MSD1												**Source: 416027-001**
Mercury	ND	5	5	5.24	5.26	ug/L	105	105	0.4	75-125	20	
QC1203173MS2, QC1203173MSD2												**Source: 416194-001**
Mercury	ND	5	5	5.33	5.31	ug/L	107	106	0.4	75-125	20	

QCBatchID: QC1203179	Analyst: Abanh	Method: EPA 8081A
Matrix: Water	Analyzed: 06/14/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203179MB1					
4,4'-DDD	ND	ug/L	0.011	0.1	
4,4'-DDE	ND	ug/L	0.006	0.1	
4,4'-DDT	ND	ug/L	0.011	0.1	
a-BHC	ND	ug/L	0.002	0.1	
Aldrin	ND	ug/L	0.007	0.1	
b-BHC	ND	ug/L	0.003	0.1	
Chlordane (technical)	ND	ug/L	0.27	1	
d-BHC	ND	ug/L	0.006	0.1	
Dieldrin	ND	ug/L	0.006	0.1	
Endosulfan I	ND	ug/L	0.004	0.1	
Endosulfan II	ND	ug/L	0.011	0.1	
Endosulfan sulfate	ND	ug/L	0.012	0.1	
Endrin	ND	ug/L	0.008	0.1	
Endrin aldehyde	ND	ug/L	0.009	0.1	
Endrin Ketone	ND	ug/L	0.011	0.1	
Heptachlor	ND	ug/L	0.003	0.1	
Heptachlor epoxide	ND	ug/L	0.002	0.1	
Lindane (Gamma-BHC)	ND	ug/L	0.002	0.1	
Methoxychlor	ND	ug/L	0.055	0.1	
Mirex	ND	ug/L	0.057	0.5	
Toxaphene	ND	ug/L	0.48	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203179LCS1, QC1203179LCSD1											
4,4'-DDD	0.5	0.5	0.40	0.43	ug/L	80	86	7	42-142	20	
4,4'-DDE	0.5	0.5	0.40	0.43	ug/L	80	86	7	48-133	20	
4,4'-DDT	0.5	0.5	0.45	0.50	ug/L	90	100	11	40-143	20	
a-BHC	0.5	0.5	0.42	0.44	ug/L	84	88	5	55-122	20	
Aldrin	0.5	0.5	0.34	0.39	ug/L	68	78	14	46-117	20	
b-BHC	0.5	0.5	0.42	0.45	ug/L	84	90	7	46-136	20	
d-BHC	0.5	0.5	0.41	0.45	ug/L	82	90	9	53-124	20	
Dieldrin	0.5	0.5	0.40	0.45	ug/L	80	90	12	49-129	20	
Endosulfan I	0.5	0.5	0.39	0.42	ug/L	78	84	7	54-122	20	
Endosulfan II	0.5	0.5	0.39	0.42	ug/L	78	84	7	46-132	20	
Endosulfan sulfate	0.5	0.5	0.44	0.48	ug/L	88	96	9	52-129	20	
Endrin	0.5	0.5	0.43	0.48	ug/L	86	96	11	57-145	20	
Endrin aldehyde	0.5	0.5	0.38	0.42	ug/L	76	84	10	48-116	20	
Endrin Ketone	0.5	0.5	0.43	0.47	ug/L	86	94	9	44-137	20	
Heptachlor	0.5	0.5	0.43	0.47	ug/L	86	94	9	51-128	20	
Heptachlor epoxide	0.5	0.5	0.37	0.41	ug/L	74	82	10	51-122	20	
Lindane (Gamma-BHC)	0.5	0.5	0.43	0.45	ug/L	86	90	5	54-128	20	
Methoxychlor	0.5	0.5	0.49	0.53	ug/L	98	106	8	52-158	20	

QCBatchID: QC1203180	Analyst: Abanh	Method: EPA 8082
Matrix: Water	Analyzed: 06/14/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203180MB1					
PCB-1016	ND	ug/L	0.058	0.5	
PCB-1221	ND	ug/L	0.253	0.5	
PCB-1232	ND	ug/L	0.196	0.5	
PCB-1242	ND	ug/L	0.169	0.5	
PCB-1248	ND	ug/L	0.1	0.5	
PCB-1254	ND	ug/L	0.054	0.5	
PCB-1260	ND	ug/L	0.08	0.5	
PCB-1262	ND	ug/L	0.045	0.5	
PCB-1268	ND	ug/L	0.062	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203180LCS1, QC1203180LCSD1											
PCB-1016	5	5	4.5	4.3	ug/L	90	86	5	70-130	20	
PCB-1260	5	5	4.8	4.6	ug/L	96	92	4	70-130	20	

QCBatchID: QC1203239	Analyst: Abanh	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/17/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203239MB1					
4,4'-DDD	ND	ug/Kg	2.1	5	
4,4'-DDE	ND	ug/Kg	2	5	
4,4'-DDT	ND	ug/Kg	2	5	
a-BHC	ND	ug/Kg	1.6	5	
Aldrin	ND	ug/Kg	1.5	5	
b-BHC	ND	ug/Kg	1.5	5	
Chlordane (technical)	ND	ug/Kg	35	50	
d-BHC	ND	ug/Kg	1.2	5	
Dieldrin	ND	ug/Kg	2.1	5	
Endosulfan I	ND	ug/Kg	1.2	5	
Endosulfan II	ND	ug/Kg	2.8	5	
Endosulfan sulfate	ND	ug/Kg	3.4	5	
Endrin	ND	ug/Kg	2.7	5	
Endrin aldehyde	ND	ug/Kg	2.1	5	
Endrin Ketone	ND	ug/Kg	4.1	5	
Heptachlor	ND	ug/Kg	1.3	5	
Heptachlor epoxide	ND	ug/Kg	2.3	5	
Lindane (Gamma-BHC)	ND	ug/Kg	2	5	
Methoxychlor	ND	ug/Kg	9.2	10	
Toxaphene	ND	ug/Kg	54	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203239LCS1											
4,4'-DDD	50		46		ug/Kg	92			43-172		
4,4'-DDE	50		47		ug/Kg	94			44-163		
4,4'-DDT	50		55		ug/Kg	110			40-158		
a-BHC	50		50		ug/Kg	100			45-150		
Aldrin	50		43		ug/Kg	86			46-142		
b-BHC	50		51		ug/Kg	102			42-156		
d-BHC	50		48		ug/Kg	96			37-161		
Dieldrin	50		48		ug/Kg	96			47-151		
Endosulfan I	50		46		ug/Kg	92			47-141		
Endosulfan II	50		46		ug/Kg	92			44-156		
Endosulfan sulfate	50		53		ug/Kg	106			43-157		
Endrin	50		51		ug/Kg	102			47-160		
Endrin aldehyde	50		43		ug/Kg	86			32-127		
Endrin Ketone	50		52		ug/Kg	104			48-159		
Heptachlor	50		52		ug/Kg	104			50-144		
Heptachlor epoxide	50		45		ug/Kg	90			48-145		
Lindane (Gamma-BHC)	50		51		ug/Kg	102			47-151		
Methoxychlor	50		62		ug/Kg	124			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203239MS1, QC1203239MSD1												**Source: 416293-036**
4,4'-DDD	ND	50	50	46	49	ug/Kg	92	98	6.3	43-172	20	
4,4'-DDE	19	50	50	66	66	ug/Kg	94	94	0.0	44-163	20	
4,4'-DDT	ND	50	50	60	61	ug/Kg	120	122	1.7	40-158	20	
a-BHC	ND	50	50	45	43	ug/Kg	90	86	4.5	45-150	20	

QCBatchID: QC1203239	Analyst: Abanh	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/17/2019	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203239MS1, QC1203239MSD1											**Source:**	**416293-036**
Aldrin	ND	50	50	39	40	ug/Kg	78	80	2.5	46-142	20	
b-BHC	ND	50	50	45	45	ug/Kg	90	90	0.0	42-156	20	
d-BHC	ND	50	50	46	47	ug/Kg	92	94	2.2	37-161	20	
Dieldrin	ND	50	50	47	48	ug/Kg	94	96	2.1	47-151	20	
Endosulfan I	ND	50	50	44	45	ug/Kg	88	90	2.2	47-141	20	
Endosulfan II	ND	50	50	45	46	ug/Kg	90	92	2.2	44-156	20	
Endosulfan sulfate	ND	50	50	51	57	ug/Kg	102	114	11.1	43-157	20	
Endrin	ND	50	50	51	51	ug/Kg	102	102	0.0	47-160	20	
Endrin aldehyde	ND	50	50	42	43	ug/Kg	84	86	2.4	32-127	20	
Endrin Ketone	ND	50	50	51	51	ug/Kg	102	102	0.0	48-159	20	
Heptachlor	ND	50	50	260	180	ug/Kg	520	360	36.4	50-144	20	M
Heptachlor epoxide	ND	50	50	42	43	ug/Kg	84	86	2.4	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	48	47	ug/Kg	96	94	2.1	47-151	20	
Methoxychlor	ND	50	50	63	64	ug/Kg	126	128	1.6	36-182	20	

QCBatchID:	**QC1203240**	**Analyst:**	Abanh	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	06/17/2019	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203240MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203240LCS1											
PCB-1016	500		430		ug/Kg	86			70-130		
PCB-1260	500		490		ug/Kg	98			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203240MS1, QC1203240MSD1												**Source: 416293-036**
PCB-1016	ND	500	500	410	400	ug/Kg	82	80	2.5	70-130	20	
PCB-1260	ND	500	500	460	460	ug/Kg	92	92	0.0	70-130	20	

QCBatchID: QC1203270	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 06/18/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203270MB1					
Antimony	**2.06 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	**0.36 J**	mg/Kg	0.31	1	
Iron	**5.64**	mg/Kg	0.4	5	B
Lead	**0.53 J**	mg/Kg	0.32	1	
Molybdenum	**0.63 J**	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	3	
Silver	**0.41 J**	mg/Kg	0.13	0.5	
Thallium	**1.64 J**	mg/Kg	0.42	3	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203270LCS1											
Antimony	100		103		mg/Kg	103			80-120		
Arsenic	100		91.8		mg/Kg	92			80-120		
Barium	100		94.8		mg/Kg	95			80-120		
Beryllium	100		101		mg/Kg	101			80-120		
Cadmium	100		95.6		mg/Kg	96			80-120		
Chromium	100		94.1		mg/Kg	94			80-120		
Cobalt	100		101		mg/Kg	101			80-120		
Copper	100		87.3		mg/Kg	87			80-120		
Lead	100		96.1		mg/Kg	96			80-120		
Molybdenum	100		102		mg/Kg	102			80-120		
Nickel	100		99.6		mg/Kg	100			80-120		
Selenium	100		89.2		mg/Kg	89			80-120		
Silver	100		108		mg/Kg	108			80-120		
Thallium	100		98.4		mg/Kg	98			80-120		
Vanadium	100		99.9		mg/Kg	100			80-120		
Zinc	100		93.8		mg/Kg	94			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203270MS1, QC1203270MSD1											**Source: 416293-001**	
Antimony	3.21	100	100	24.3	24.6	mg/Kg	21	21	1.2	75-125	20	M
Arsenic	20.0	100	100	112	107	mg/Kg	92	87	4.6	75-125	20	
Barium	128	100	100	224	220	mg/Kg	96	92	1.8	75-125	20	
Beryllium	ND	100	100	99.1	101	mg/Kg	99	101	1.9	75-125	20	
Cadmium	2.20	100	100	92.1	88.5	mg/Kg	90	86	4.0	75-125	20	
Chromium	44.4	100	100	138	133	mg/Kg	94	89	3.7	75-125	20	
Cobalt	13.8	100	100	108	103	mg/Kg	94	89	4.7	75-125	20	
Copper	28.2	100	100	116	113	mg/Kg	88	85	2.6	75-125	20	
Lead	7.34	100	100	98.6	95.2	mg/Kg	91	88	3.5	75-125	20	

QCBatchID:	**QC1203270**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203270MS1, QC1203270MSD1												**Source: 416293-001**
Molybdenum	1.26	100	100	92.2	89.5	mg/Kg	91	88	3.0	75-125	20	
Nickel	32.1	100	100	127	122	mg/Kg	95	90	4.0	75-125	20	
Selenium	ND	100	100	88.4	85.2	mg/Kg	88	85	3.7	75-125	20	
Silver	ND	100	100	105	101	mg/Kg	105	101	3.9	75-125	20	
Thallium	ND	100	100	86.6	86.2	mg/Kg	87	86	0.5	75-125	20	
Vanadium	74.7	100	100	183	176	mg/Kg	108	101	3.9	75-125	20	
Zinc	71.1	100	100	162	158	mg/Kg	91	87	2.5	75-125	20	

QCBatchID:	**QC1203274**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203274MB1					
Arsenic	ND	mg/Kg	0.108	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203274LCS1											
Arsenic	50		56.8		mg/Kg	114			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203274MS1, QC1203274MSD1												**Source: 416293-001**
Arsenic	17.9	50	50	59.8	60.0	mg/Kg	120	84	0.3	75-125	20	

QCBatchID:	**QC1203275**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203275MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203275LCS1											
Arsenic	50		56.9		mg/Kg	114			80-120		
Lead	50		55.6		mg/Kg	111			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203275MS1, QC1203275MSD1												**Source: 416293-021**
Arsenic	25.1	50	50	74.3	62.3	mg/Kg	98	74	17.6	75-125	20	M
Lead	32.4	50	50	86.9	65.9	mg/Kg	109	67	27.5	75-125	20	M

QCBatchID:	**QC1203299**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203299MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203299LCS1											
Arsenic	50		57.3		mg/Kg	115			80-120		
Lead	50		56.3		mg/Kg	113			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203299MS1, QC1203299MSD1												**Source: 416293-041**
Arsenic	10.4	50	50	60.1	57.5	mg/Kg	99	94	4.4	75-125	20	
Lead	15.7	50	50	67.4	67.2	mg/Kg	103	103	0.3	75-125	20	

QCBatchID:	**QC1203300**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203300MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203300LCS1											
Arsenic	50		57.0		mg/Kg	114			80-120		
Lead	50		55.7		mg/Kg	111			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203300MS1, QC1203300MSD1												**Source: 416293-061**
Arsenic	11.6	50	50	53.7	53.7	mg/Kg	84	84	0.0	75-125	20	
Lead	7.09	50	50	56.8	56.6	mg/Kg	99	99	0.4	75-125	20	

QCBatchID:	**QC1203360**	**Analyst:**	sbailey-woo	**Method:**	EPA 6020
Matrix:	Water	**Analyzed:**	06/19/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203360MB1					
Arsenic	ND	ug/L	0.31	2	
Lead	ND	ug/L	0.76	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203360LCS1											
Arsenic	50		46.7		ug/L	93			80-120		
Lead	50		52.2		ug/L	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203360MS1, QC1203360MSD1												**Source: 416293-069**
Arsenic	ND	50	50	45.2	46.3	ug/L	90	93	2.4	75-125	20	
Lead	ND	50	50	52.4	52.5	ug/L	105	105	0.2	75-125	20	

QCBatchID:	**QC1203427**	**Analyst:**	cmorales	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	06/20/2019	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203427MB1					
Mercury	ND	mg/Kg	0.039	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203427LCS1											
Mercury	0.83		0.86		mg/Kg	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203427MS1, QC1203427MSD1												**Source: 416440-001**
Mercury	ND	0.83	0.83	0.89	0.87	mg/Kg	107	105	2.3	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL, INC.

931 W. Barkley Ave., Orange, CA 92868

Phone: (714) 771-6900 Fax: (714) 538-1209

Billing: Enthalpy - SoCal

c/o Montrose Environmental Group

1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 416293

Page: 1 of 7

Turn Around Time (Rush by advanced notice only)

Standard:	X	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B61B-10.0	6/13/19	0731	S	1x8oz Jar	Ice				X	X						
B61B-10.0-DUP		0731							X	X						
B61A-10.0		0747							X	X						
B20A-0.5		0812								X						
B20A-0.5-DUP		0812								X						
B20B-0.5		0811								X						
B20C-0.5		0814								X						
B20D-0.5		0816								X						
B11C-1.5		0831								X						
B11A-1.5	6/13/19	0834	S	1x8oz Jar	Ice					X						

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	Tanner Rickard	Tanner Rickard	Terraphase / Geologist	6/13/19 1502
1 Received By:	[illegible]	[illegible]	Enthalpy	6/13/19 1502
2 Relinquished By:	[illegible]	[illegible]	"	6/13/19 1715
2 Received By:	[illegible]	[illegible]	EA	6/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.

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Chain of Custody Record

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Page: 2 of 7

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Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B11A - 1.5 - DUP	6/13/19	0834	S	1x8oz Jar	Ice					X						
B11A - 2.5		0836								X						
B11C - 2.5		0836								X						
B11A - 3.5		0838								X						Mold
B11C - 3.5		0840								X						Mold
B11B - 1.5		0847								X						
B11D - 1.5		0850								X						
B11B - 2.5		0851								X						
B11B - 3.5		0856								X						Mold
B11D - 2.5	6/13/19	0901	S	1x8oz Jar	Ice					X						

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	Terraphase / Geologist	6/13/19 1502
1 Received By:	[illegible]	[illegible]	Enthalpy	6/13/19 1502
2 Relinquished By:	[illegible]	[illegible]	"	6/13/19 1715
2 Received By:	[illegible]	Utherman	EPA	6/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave., Orange, CA 92868	Lab No: 416293	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714) 538-1209	Page: 3 of 7	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
1 Park Plaza, Suite 1000, Irvine, CA 92614							

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
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Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B11D-3.5	6/13/19	0908	S	1x8oz Jar	Ice					X						Hold
B18B-2.5	↓	0930	↓	↓	↓					X						
B18B-2.5-DUP	↓	0930	↓	↓	↓					X						
B18B-3.5	↓	0934	↓	↓	↓					X						Hold
B18D-2.5	↓	0935	↓	↓	↓					X						
B18D-3.5	↓	0939	↓	↓	↓					X						Hold
B18C-2.5	↓	0943	↓	↓	↓					X						
B18C-3.5	↓	0948	↓	↓	↓					X						Hold
B18A-2.5	↓	0950	↓	↓	↓					X						
B18A-3.5	6/13/19	0953	S	1x8oz Jar	Ice					X						Hold

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/13/19 1502
1 Received By:	[signature]	HAO TRAN	Enthalpy	6/13/19 1502
2 Relinquished By:	[signature]	HAO TRAN	"	6/13/19 1715
2 Received By:	[signature]	[signature]	EA	6/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.

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1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 416293

Page: 4 of 7

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2 Day:		1 Day:		Same Day:	

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Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

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Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)	PCBs (EPA Method			Test Instructions / Comments
B91A-1.5	6/13/19	1008	S	1x8oz Jar	Ice						X					
B91A-1.5-DUP		1008									X					
B91B-1.5		1014									X					
B91C-1.5		1007									X					
B70B-0.5		1036						X		~~X~~		X				
B70A-0.5		1038						X		~~X~~		X	X			
B70A-0.5-DUP		1038						X		~~X~~		X	X			Hold
B70B-1.5		1039						X		~~X~~		X				
B70A-1.5	6/13/19	1041						X		~~X~~		X				
B10A-0.5	6/13/19	1118	S	1x8oz Jar	Ice					X						

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/13/19 1503
1 Received By:	[signature]	HAO TRAN	Enthalpy	6/13/19 1502
2 Relinquished By:	[signature]	HAO TRAN	"	6/13/19 1715
2 Received By:	[signature]	Leatherman	CA	6/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.

931 W. Barkley Ave., Orange, CA 92868

Phone: (714) 771-6900 Fax: (714) 538-1209

Billing: Enthalpy - SoCal

c/o Montrose Environmental Group

1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 416293

Page: 5 of 7

Turn Around Time (Rush by advanced notice only)

Standard:	X	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B10A-0.5-DUP	6/13/19	1118	S	1x 8oz Jar	Ice						X					
B10B-0.5		1120									X					
B10C-0.5		1121									X					
B25A-0.5		1216									X					
B25A-0.5-DUP		1216									X					
B25D-0.5		1220									X					
B25C-0.5		1222									X					
B25B-0.5		1225									X					
B12C-0.5		1237									X					
B12D-0.5	6/13/19	1236	S	1x 8oz Jar	Ice						X					

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/13/19 1502
1 Received By:	[signature]	HAO TRAN	Enthalpy	6/13/19 1502
2 Relinquished By:	[signature]	HAO TRAN	"	6/13/19 1715
2 Received By:	[signature]	Katie Atherman	EA	6/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.

931 W. Barkley Ave., Orange, CA 92868

Phone: (714) 771-6900 Fax: (714) 538-1209

Billing: Enthalpy - SoCal

c/o Montrose Environmental Group

1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 416293

Page: 6 of 7

Turn Around Time (Rush by advanced notice only)

Standard:	X	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)				Test Instructions / Comments
B12A-0.5	6/13/19	1241	S	1x8oz Jar	Ice						X					
B12A-0.5-DUP		1241									X					
B12B-0.5		1247									X					
B03C-1.5		1252									X					
B03B-1.5		1300									X					
B03A-1.5		1257									X					
B94-0.5		1317								X	X	X				
B94-1.5		1321								X	X	X				
B94-2.5		1324								X	X	X				
B95-0.5	6/13/19	1333	S	1x8oz Jar	Ice					X	X	X				

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	Terraphase / Geologist	6/13/19 1502
1 Received By:	[illegible]	[illegible]	Enthalpy	6/13/19 1502
2 Relinquished By:	[illegible]	[illegible]	"	6/13/19 1715
2 Received By:	[illegible]	Weatherman	EA	06/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave., Orange, CA 92868	Lab No: 416293	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714) 538-1209	Page: 7 of 7	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
1 Park Plaza, Suite 1000, Irvine, CA 92614							

ENTHALPY analytical, inc.

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Analysis Request

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)	PCBs (EPA Method 8082)			Test Instructions / Comments
B95-1.5	6/13/19	~~6/13/19~~ ~~1333~~ 1337	S	1x8oz Jar	Ice					X	X	X				
B95-2.5	↓	1340	↓	↓	↓					X	X	X				
B96-0.5	↓	1351	↓	↓	↓					X	X	X				
B96-1.5	↓	1354	↓	↓	↓					X	X	X				
B96-2.5	↓	1356	↓	↓	↓					X	X	X				
B97-0.5	↓	1403	↓	↓	↓					X	X	X				
B97-1.5	↓	1405	↓	↓	↓					X	X	X				
B97-2.5	↓	1411	S	1x8oz Jar	Ice					X	X	X				
EB-02	6/13/19	1429	W	2x poly 2x amber	3 Ice			X	X	X	X	X	X			

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/13/19 1502
1 Received By:	[signature]	HAO TRAN	Enthalpy	6/13/19 1502
2 Relinquished By:	[signature]	HAO TRAN	"	6/13/19 1715
2 Received By:	[signature]	Katherman	EA	6/13/19 1715
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Engineering

Project: Hamilton HS

Date Received: 6/13/19

Sampler's Name Present: ☒ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 2 ☐ No (skip section 2)

Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 10.7 #2: 11.2 #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 4.0 #2: 2.3 #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: [signature] Date: 06/13/19

From:	Clare Steedman
To:	Diane Galvan
Subject:	RE: Hamilton High School, LR# 416293
Date:	Friday, June 14, 2019 2:15:33 PM
Attachments:	image001.png image002.png

Thank you Diane. Please make the following change:

- Sample 416293-040, B10A-0.5 – change from reporting arsenic to **lead**

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Diane Galvan <diane.galvan@enthalpy.com>
Sent: Friday, June 14, 2019 12:53 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: Hamilton High School, LR# 416293

Hi Clare,

Here is a copy of the COC and login sheets for the samples picked-up on 6/13/19.

Thanks,

Diane Galvan
Senior Project Manager
West Coast

Enthalpy Analytical
931 W. Barkley Ave., Orange, CA 92868
O: 714.771.6900 D: 714.771.9928 M: 714.812.8119
diane.galvan@enthalpy.com

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931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Terraphase Engineering
Address: 18401 Von Karman Ave, Suite #410
Irvine, CA 92612

Attn: Clare Steedman

Comments: Hamilton High School
S030.008.003

Supplemental Report

Lab Request: 416329
Report Date: 06/28/2019
Date Received: 06/14/2019
Client ID: 15743

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
416329-001	B83-0.5	416329-025	B86-2.5	416329-050	B108-0.5
416329-002	B83-0.5-DUP	416329-026	B84-0.5	416329-051	B108-1.5
416329-003	B83-1.5	416329-027	B84-1.5	416329-052	B108-2.5
416329-004	B83-2.5	416329-028	B84-2.5	416329-053	B107-0.5
416329-005	B79-0.5	416329-029	B101-0.5	416329-054	B107-0.5-DUP
416329-006	B79-0.5-DUP	416329-030	B101-0.5-DUP	416329-055	B107-1.5
416329-007	B79-1.5	416329-031	B101-1.5	416329-056	B107-2.5
416329-008	B79-2.5	416329-032	B101-2.5	416329-057	B106-0.5
416329-009	B81-0.5	416329-033	B102-0.5	416329-058	B106-1.5
416329-010	B81-0.5-DUP	416329-035	B102-1.5	416329-059	B106-2.5
416329-011	B81-1.5	416329-036	B102-2.5	416329-060	B105-0.5
416329-012	B81-2.5	416329-037	B100-0.5	416329-061	B105-1.5
416329-013	B80-0.5	416329-038	B100-1.5	416329-062	B105-2.5
416329-014	B80-1.5	416329-039	B100-2.5	416329-063	B105-0.5-DUP
416329-015	B80-2.5	416329-040	B99-0.5	416329-064	B104-0.5
416329-016	B82-0.5	416329-041	B99-0.5-DUP	416329-065	B104-1.5
416329-017	B82-1.5	416329-042	B99-1.5	416329-066	B104-2.5
416329-018	B82-2.5	416329-043	B99-2.5	416329-067	B103-0.5
416329-019	B85-0.5	416329-044	B98-0.5	416329-068	B103-0.5-DUP
416329-020	B85-0.5-DUP	416329-045	B98-1.5	416329-069	B103-1.5
416329-021	B85-1.5	416329-046	B98-2.5	416329-070	B103-2.5
416329-022	B85-2.5	416329-047	B109-0.5	416329-071	EB-03
416329-023	B86-0.5	416329-048	B109-1.5		
416329-024	B86-1.5	416329-049	B109-2.5		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Diane M. Galvan

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:39	**Site:**			
Sample #:	**416329-001**	**Client Sample #:**	B83-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**6.88**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**88.6**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	**4.3 J**	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	**8.6**	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	**6.4**	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*105*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*93*	*50-150*	

Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203221	
PCB-1016	ND	1	3	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/17/19	06/18/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*83*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:39	**Site:**			
Sample #:	**416329-002**	**Client Sample #:**	B83-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**11.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**18.5**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*85*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*79*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:43	**Site:**			
Sample #:	**416329-003**	**Client Sample #:**	B83-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**14.8**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.29**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/18/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/18/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/18/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/18/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/18/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/18/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/18/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/18/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/18/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/18/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*90*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*79*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:45	**Site:**			
Sample #:	**416329-004**	**Client Sample #:**	B83-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**23.8**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**5.23**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*70*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:54	**Site:**			
Sample #:	**416329-005**	**Client Sample #:**	B79-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**14.2**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**9.35**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*82*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*73*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203221	
PCB-1016	ND	1	3	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*78*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:54	**Site:**			
Sample #:	**416329-006**	**Client Sample #:**	B79-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**16.3**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**8.19**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*73*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*65*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 07:56	**Site:**			
Sample #:	**416329-007**	**Client Sample #:**	B79-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**20.6**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**24.1**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*71*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*67*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:01	**Site:**			
Sample #:	**416329-008**	**Client Sample #:**	B79-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**14.2**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**6.81**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*69*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*64*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:10	**Site:**			
Sample #:	**416329-009**	**Client Sample #:**	B81-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**6.05**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**14.0**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*70*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*58*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203221	
PCB-1016	ND	1	3	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*67*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:10	**Site:**			
Sample #:	**416329-010**	**Client Sample #:**	B81-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**4.62**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**15.4**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*67*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*62*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:11	**Site:**			
Sample #:	**416329-011**	**Client Sample #:**	B81-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**11.3**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**12.0**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*72*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*66*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:13	**Site:**			
Sample #:	**416329-012**	**Client Sample #:**	B81-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203300	
Arsenic	**12.7**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.60**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*69*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*65*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:18	**Site:**			
Sample #:	**416329-013**	**Client Sample #:**	B80-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**4.20**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**29.9**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*68*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*59*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:21	**Site:**			
Sample #:	**416329-014**	**Client Sample #:**	B80-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**15.2**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**12.9**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*63*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*57*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:25	**Site:**			
Sample #:	**416329-015**	**Client Sample #:**	B80-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**13.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.46**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*73*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*63*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:32	**Site:**			
Sample #:	**416329-016**	**Client Sample #:**	B82-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**2.70**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**9.01**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*59*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*53*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:34	**Site:**			
Sample #:	**416329-017**	**Client Sample #:**	B82-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**11.3**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**17.0**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*66*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*61*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 08:36	**Site:**			
Sample #:	**416329-018**	**Client Sample #:**	B82-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**11.9**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**8.11**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*62*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*62*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:01	**Site:**			
Sample #:	**416329-019**	**Client Sample #:**	B85-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC — Prep Method: EPA 3050B							QCBatchID: QC1203303		
Arsenic	**5.42**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**28.8**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B NELAC — Prep Method: EPA 5035A							QCBatchID: QC1203293		
TPH Gasoline	ND	1.59	0.38001	4.77	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M — Prep Method: EPA 3580A							QCBatchID: QC1203546		
TPH Diesel	ND	1	10	10	mg/Kg		06/26/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg		06/26/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*119*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A NELAC — Prep Method: EPA 3545							QCBatchID: QC1203220		
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*64*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*58*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 NELAC — Prep Method: EPA 3545							QCBatchID: QC1203221		
PCB-1016	ND	1	3	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/17/19	06/20/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*61*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B NELAC — Prep Method: EPA 5035A							QCBatchID: QC1203262		
1,1,1,2-Tetrachloroethane	ND	1.1	0.264	5.5	ug/Kg		06/17/19	LZ	
1,1,1-Trichloroethane	ND	1.1	0.165	5.5	ug/Kg		06/17/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1.1	0.319	5.5	ug/Kg		06/17/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:01	**Site:**			
Sample #:	**416329-019**	**Client Sample #:**	B85-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,1,2-Trichloroethane	ND	1.1	0.242	5.5	ug/Kg		06/17/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1.1	0.814	5.5	ug/Kg		06/17/19	LZ	
1,1-Dichloroethane	ND	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
1,1-Dichloroethene	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
1,1-Dichloropropene	ND	1.1	0.231	5.5	ug/Kg		06/17/19	LZ	
1,2,3-Trichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
1,2,3-Trichloropropane	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
1,2,4-Trichlorobenzene	ND	1.1	0.363	5.5	ug/Kg		06/17/19	LZ	
1,2,4-Trimethylbenzene	**0.47 J**	1.1	0.308	5.5	ug/Kg		06/17/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
1,2-Dibromoethane	ND	1.1	0.132	5.5	ug/Kg		06/17/19	LZ	
1,2-Dichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
1,2-Dichloroethane	ND	1.1	0.154	5.5	ug/Kg		06/17/19	LZ	
1,2-Dichloropropane	ND	1.1	0.374	5.5	ug/Kg		06/17/19	LZ	
1,3,5-Trimethylbenzene	ND	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
1,3-Dichlorobenzene	ND	1.1	0.231	5.5	ug/Kg		06/17/19	LZ	
1,3-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	
1,4-Dichlorobenzene	ND	1.1	0.264	5.5	ug/Kg		06/17/19	LZ	
2,2-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	
2-Butanone (MEK)	**19 J**	1.1	0.792	110	ug/Kg		06/17/19	LZ	
2-Chlorotoluene	ND	1.1	0.275	5.5	ug/Kg		06/17/19	LZ	
4-Chlorotoluene	ND	1.1	0.242	5.5	ug/Kg		06/17/19	LZ	
4-Isopropyltoluene	ND	1.1	0.297	5.5	ug/Kg		06/17/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1.1	0.187	5.5	ug/Kg		06/17/19	LZ	
Acetone	**280**	1.1	55	110	ug/Kg		06/17/19	LZ	
Allyl Chloride	ND	1.1	0.154	5.5	ug/Kg		06/17/19	LZ	
Benzene	**1.2 J**	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
Bromobenzene	ND	1.1	0.33	5.5	ug/Kg		06/17/19	LZ	
Bromochloromethane	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
Bromodichloromethane	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
Bromoform	ND	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	
Bromomethane	ND	1.1	0.242	5.5	ug/Kg		06/17/19	LZ	
Carbon Tetrachloride	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
Chlorobenzene	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
Chlorodibromomethane	ND	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	
Chloroethane	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
Chloroform	ND	1.1	0.187	5.5	ug/Kg		06/17/19	LZ	
Chloromethane	ND	1.1	0.231	5.5	ug/Kg		06/17/19	LZ	
cis-1,2-Dichloroethene	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
cis-1,3-dichloropropene	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
cis-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
Dibromomethane	ND	1.1	0.231	5.5	ug/Kg		06/17/19	LZ	
Dichlorodifluoromethane	ND	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
Di-isopropyl ether (DIPE)	ND	1.1	0.231	5.5	ug/Kg		06/17/19	LZ	
Ethylbenzene	**0.47 J**	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1.1	0.462	5.5	ug/Kg		06/17/19	LZ	
Hexachlorobutadiene	ND	1.1	0.462	5.5	ug/Kg		06/17/19	LZ	
Isopropylbenzene	ND	1.1	0.275	5.5	ug/Kg		06/17/19	LZ	
m and p-Xylene	**1.6 J**	1.1	0.418	5.5	ug/Kg		06/17/19	LZ	
Methylene chloride	ND	1.1	0.231	5.5	ug/Kg		06/17/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1.1	0.187	5.5	ug/Kg		06/17/19	LZ	
Naphthalene	ND	1.1	0.176	5.5	ug/Kg		06/17/19	LZ	
N-butylbenzene	ND	1.1	0.275	5.5	ug/Kg		06/17/19	LZ	
N-propylbenzene	ND	1.1	0.242	5.5	ug/Kg		06/17/19	LZ	
o-Xylene	**0.66 J**	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:01	**Site:**			
Sample #:	**416329-019**	**Client Sample #:**	B85-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Sec-butylbenzene	ND	1.1	0.308	5.5	ug/Kg		06/17/19	LZ	
Styrene	ND	1.1	0.143	5.5	ug/Kg		06/17/19	LZ	
t-Butyl alcohol (TBA)	**19**	1.1	9.68	11	ug/Kg		06/17/19	LZ	
Tert-amylmethylether (TAME)	ND	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	
Tert-butylbenzene	ND	1.1	0.374	5.5	ug/Kg		06/17/19	LZ	
Tetrachloroethene	ND	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
Toluene	**1.4 J**	1.1	0.187	5.5	ug/Kg		06/17/19	LZ	
trans-1,2-dichloroethene	ND	1.1	0.209	5.5	ug/Kg		06/17/19	LZ	
trans-1,3-dichloropropene	ND	1.1	0.198	5.5	ug/Kg		06/17/19	LZ	
trans-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		06/17/19	LZ	
Trichloroethene	ND	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
Trichlorofluoromethane	ND	1.1	0.253	5.5	ug/Kg		06/17/19	LZ	
Vinyl Chloride	ND	1.1	0.154	5.5	ug/Kg		06/17/19	LZ	
Xylenes (Total)	**2.26 J**	1.1	0.418	5.5	ug/Kg		06/17/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*113*	*70-145*	
4-Bromofluorobenzene (SUR)	*102*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*93*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:04	**Site:**			
Sample #:	**416329-020**	**Client Sample #:**	B85-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**6.12**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**29.9**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.98	0.23422	2.94	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203546	
TPH Diesel	ND	1	10	10	mg/Kg		06/26/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg		06/26/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*139*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203220	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/17/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/17/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/17/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/17/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/17/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/17/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/17/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/17/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/17/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/17/19	06/20/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*72*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*68*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203262	
1,1,1,2-Tetrachloroethane	ND	1.2	0.288	6	ug/Kg		06/17/19	LZ	
1,1,1-Trichloroethane	ND	1.2	0.18	6	ug/Kg		06/17/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1.2	0.348	6	ug/Kg		06/17/19	LZ	
1,1,2-Trichloroethane	ND	1.2	0.264	6	ug/Kg		06/17/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1.2	0.888	6	ug/Kg		06/17/19	LZ	
1,1-Dichloroethane	ND	1.2	0.276	6	ug/Kg		06/17/19	LZ	
1,1-Dichloroethene	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
1,1-Dichloropropene	ND	1.2	0.252	6	ug/Kg		06/17/19	LZ	
1,2,3-Trichlorobenzene	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
1,2,3-Trichloropropane	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
1,2,4-Trichlorobenzene	ND	1.2	0.396	6	ug/Kg		06/17/19	LZ	
1,2,4-Trimethylbenzene	ND	1.2	0.336	6	ug/Kg		06/17/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
1,2-Dibromoethane	ND	1.2	0.144	6	ug/Kg		06/17/19	LZ	
1,2-Dichlorobenzene	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
1,2-Dichloroethane	ND	1.2	0.168	6	ug/Kg		06/17/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:04	**Site:**			
Sample #:	**416329-020**	**Client Sample #:**	B85-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2-Dichloropropane	ND	1.2	0.408	6	ug/Kg		06/17/19	LZ	
1,3,5-Trimethylbenzene	ND	1.2	0.276	6	ug/Kg		06/17/19	LZ	
1,3-Dichlorobenzene	ND	1.2	0.252	6	ug/Kg		06/17/19	LZ	
1,3-Dichloropropane	ND	1.2	0.228	6	ug/Kg		06/17/19	LZ	
1,4-Dichlorobenzene	ND	1.2	0.288	6	ug/Kg		06/17/19	LZ	
2,2-Dichloropropane	ND	1.2	0.228	6	ug/Kg		06/17/19	LZ	
2-Butanone (MEK)	**15 J**	1.2	0.864	120	ug/Kg		06/17/19	LZ	
2-Chlorotoluene	ND	1.2	0.3	6	ug/Kg		06/17/19	LZ	
4-Chlorotoluene	ND	1.2	0.264	6	ug/Kg		06/17/19	LZ	
4-Isopropyltoluene	ND	1.2	0.324	6	ug/Kg		06/17/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1.2	0.204	6	ug/Kg		06/17/19	LZ	
Acetone	**160**	1.2	60	120	ug/Kg		06/17/19	LZ	
Allyl Chloride	ND	1.2	0.168	6	ug/Kg		06/17/19	LZ	
Benzene	**1.6 J**	1.2	0.216	6	ug/Kg		06/17/19	LZ	
Bromobenzene	ND	1.2	0.36	6	ug/Kg		06/17/19	LZ	
Bromochloromethane	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
Bromodichloromethane	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
Bromoform	ND	1.2	0.228	6	ug/Kg		06/17/19	LZ	
Bromomethane	ND	1.2	0.264	6	ug/Kg		06/17/19	LZ	
Carbon Tetrachloride	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
Chlorobenzene	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
Chlorodibromomethane	ND	1.2	0.228	6	ug/Kg		06/17/19	LZ	
Chloroethane	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
Chloroform	ND	1.2	0.204	6	ug/Kg		06/17/19	LZ	
Chloromethane	ND	1.2	0.252	6	ug/Kg		06/17/19	LZ	
cis-1,2-Dichloroethene	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
cis-1,3-dichloropropene	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
cis-1,4-dichloro-2-butene	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
Dibromomethane	ND	1.2	0.252	6	ug/Kg		06/17/19	LZ	
Dichlorodifluoromethane	ND	1.2	0.276	6	ug/Kg		06/17/19	LZ	
Di-isopropyl ether (DIPE)	ND	1.2	0.252	6	ug/Kg		06/17/19	LZ	
Ethylbenzene	**0.28 J**	1.2	0.276	6	ug/Kg		06/17/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1.2	0.504	6	ug/Kg		06/17/19	LZ	
Hexachlorobutadiene	ND	1.2	0.504	6	ug/Kg		06/17/19	LZ	
Isopropylbenzene	ND	1.2	0.3	6	ug/Kg		06/17/19	LZ	
m and p-Xylene	**1.1 J**	1.2	0.456	6	ug/Kg		06/17/19	LZ	
Methylene chloride	ND	1.2	0.252	6	ug/Kg		06/17/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1.2	0.204	6	ug/Kg		06/17/19	LZ	
Naphthalene	ND	1.2	0.192	6	ug/Kg		06/17/19	LZ	
N-butylbenzene	ND	1.2	0.3	6	ug/Kg		06/17/19	LZ	
N-propylbenzene	ND	1.2	0.264	6	ug/Kg		06/17/19	LZ	
o-Xylene	**0.48 J**	1.2	0.228	6	ug/Kg		06/17/19	LZ	
Sec-butylbenzene	ND	1.2	0.336	6	ug/Kg		06/17/19	LZ	
Styrene	ND	1.2	0.156	6	ug/Kg		06/17/19	LZ	
t-Butyl alcohol (TBA)	ND	1.2	10.56	12	ug/Kg		06/17/19	LZ	
Tert-amylmethylether (TAME)	ND	1.2	0.228	6	ug/Kg		06/17/19	LZ	
Tert-butylbenzene	ND	1.2	0.408	6	ug/Kg		06/17/19	LZ	
Tetrachloroethene	ND	1.2	0.276	6	ug/Kg		06/17/19	LZ	
Toluene	**1.1 J**	1.2	0.204	6	ug/Kg		06/17/19	LZ	
trans-1,2-dichloroethene	ND	1.2	0.228	6	ug/Kg		06/17/19	LZ	
trans-1,3-dichloropropene	ND	1.2	0.216	6	ug/Kg		06/17/19	LZ	
trans-1,4-dichloro-2-butene	ND	1.2	0.24	6	ug/Kg		06/17/19	LZ	
Trichloroethene	ND	1.2	0.276	6	ug/Kg		06/17/19	LZ	
Trichlorofluoromethane	ND	1.2	0.276	6	ug/Kg		06/17/19	LZ	
Vinyl Chloride	ND	1.2	0.168	6	ug/Kg		06/17/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:04	**Site:**			
Sample #:	**416329-020**	**Client Sample #:**	B85-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Xylenes (Total)	**1.58 J**	1.2	0.456	6	ug/Kg		06/17/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*100*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*91*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:06	**Site:**			
Sample #:	**416329-021**	**Client Sample #:**	B85-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**12.3**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**9.40**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	1.11	0.26529	3.33	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*90*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203546	
TPH Diesel	ND	1	10	10	mg/Kg		06/26/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg		06/26/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*137*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*92*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*74*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		06/18/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		06/18/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		06/18/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		06/18/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		06/18/19	LZ	
1,2,4-Trimethylbenzene	**0.25 J**	0.8	0.224	4	ug/Kg		06/18/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		06/18/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:06	**Site:**			
Sample #:	**416329-021**	**Client Sample #:**	B85-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		06/18/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		06/18/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
2-Butanone (MEK)	**8.0 J**	0.8	0.576	80	ug/Kg		06/18/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		06/18/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		06/18/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		06/18/19	LZ	
Acetone	**92**	0.8	40	80	ug/Kg		06/18/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		06/18/19	LZ	
Benzene	**0.29 J**	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		06/18/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		06/18/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		06/18/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		06/18/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		06/18/19	LZ	
m and p-Xylene	**0.86 J**	0.8	0.304	4	ug/Kg		06/18/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		06/18/19	LZ	
Naphthalene	ND	0.8	0.128	4	ug/Kg		06/18/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		06/18/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
o-Xylene	**0.25 J**	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		06/18/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		06/18/19	LZ	
t-Butyl alcohol (TBA)	**8.3**	0.8	7.04	8	ug/Kg		06/18/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		06/18/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Toluene	**0.53 J**	0.8	0.136	4	ug/Kg		06/18/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:06	**Site:**			
Sample #:	**416329-021**	**Client Sample #:**	B85-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Xylenes (Total)	**1.11 J**	0.8	0.304	4	ug/Kg		06/18/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*117*	*70-145*	
4-Bromofluorobenzene (SUR)	*90*	*70-145*	
Dibromofluoromethane (SUR)	*110*	*70-145*	
Toluene-d8 (SUR)	*91*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:09	**Site:**			
Sample #:	**416329-022**	**Client Sample #:**	B85-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**14.4**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.60**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	1.02	0.24378	3.06	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203546	
TPH Diesel	ND	1	10	10	mg/Kg		06/26/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg		06/26/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*133*	*50-150*	

Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*81*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*71*	*50-150*	

Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		06/18/19	LZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		06/18/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		06/18/19	LZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		06/18/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		06/18/19	LZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		06/18/19	LZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		06/18/19	LZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		06/18/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		06/18/19	LZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:09	**Site:**			
Sample #:	**416329-022**	**Client Sample #:**	B85-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		06/18/19	LZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		06/18/19	LZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		06/18/19	LZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
2-Butanone (MEK)	**3.8 J**	0.7	0.504	70	ug/Kg		06/18/19	LZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		06/18/19	LZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		06/18/19	LZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		06/18/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		06/18/19	LZ	
Acetone	**51 J**	0.7	35	70	ug/Kg		06/18/19	LZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		06/18/19	LZ	
Benzene	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		06/18/19	LZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		06/18/19	LZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		06/18/19	LZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		06/18/19	LZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		06/18/19	LZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		06/18/19	LZ	
Ethylbenzene	**0.18 J**	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		06/18/19	LZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		06/18/19	LZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		06/18/19	LZ	
m and p-Xylene	**0.63 J**	0.7	0.266	3.5	ug/Kg		06/18/19	LZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		06/18/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		06/18/19	LZ	
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		06/18/19	LZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		06/18/19	LZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		06/18/19	LZ	
o-Xylene	**0.21 J**	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		06/18/19	LZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		06/18/19	LZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		06/18/19	LZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		06/18/19	LZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
Toluene	**0.47 J**	0.7	0.119	3.5	ug/Kg		06/18/19	LZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		06/18/19	LZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		06/18/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		06/18/19	LZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		06/18/19	LZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:09	**Site:**			
Sample #:	**416329-022**	**Client Sample #:**	B85-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Xylenes (Total)	**0.84 J**	0.7	0.266	3.5	ug/Kg		06/18/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*123*	*70-145*	
4-Bromofluorobenzene (SUR)	*90*	*70-145*	
Dibromofluoromethane (SUR)	*115*	*70-145*	
Toluene-d8 (SUR)	*89*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:17	**Site:**			
Sample #:	**416329-023**	**Client Sample #:**	B86-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**2.75**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**11.4**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	1.22	0.29158	3.66	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203546	
TPH Diesel	ND	1	10	10	mg/Kg		06/26/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg		06/26/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*140*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	**2.3 J**	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*74*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*63*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203262	
1,1,1,2-Tetrachloroethane	ND	1.4	0.336	7	ug/Kg		06/18/19	LZ	
1,1,1-Trichloroethane	ND	1.4	0.21	7	ug/Kg		06/18/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1.4	0.406	7	ug/Kg		06/18/19	LZ	
1,1,2-Trichloroethane	ND	1.4	0.308	7	ug/Kg		06/18/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1.4	1.036	7	ug/Kg		06/18/19	LZ	
1,1-Dichloroethane	ND	1.4	0.322	7	ug/Kg		06/18/19	LZ	
1,1-Dichloroethene	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
1,1-Dichloropropene	ND	1.4	0.294	7	ug/Kg		06/18/19	LZ	
1,2,3-Trichlorobenzene	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
1,2,3-Trichloropropane	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
1,2,4-Trichlorobenzene	ND	1.4	0.462	7	ug/Kg		06/18/19	LZ	
1,2,4-Trimethylbenzene	**0.54 J**	1.4	0.392	7	ug/Kg		06/18/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
1,2-Dibromoethane	ND	1.4	0.168	7	ug/Kg		06/18/19	LZ	
1,2-Dichlorobenzene	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
1,2-Dichloroethane	ND	1.4	0.196	7	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:17	**Site:**			
Sample #:	**416329-023**	**Client Sample #:**	B86-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2-Dichloropropane	ND	1.4	0.476	7	ug/Kg		06/18/19	LZ	
1,3,5-Trimethylbenzene	ND	1.4	0.322	7	ug/Kg		06/18/19	LZ	
1,3-Dichlorobenzene	ND	1.4	0.294	7	ug/Kg		06/18/19	LZ	
1,3-Dichloropropane	ND	1.4	0.266	7	ug/Kg		06/18/19	LZ	
1,4-Dichlorobenzene	ND	1.4	0.336	7	ug/Kg		06/18/19	LZ	
2,2-Dichloropropane	ND	1.4	0.266	7	ug/Kg		06/18/19	LZ	
2-Butanone (MEK)	**21 J**	1.4	1.008	140	ug/Kg		06/18/19	LZ	
2-Chlorotoluene	ND	1.4	0.35	7	ug/Kg		06/18/19	LZ	
4-Chlorotoluene	ND	1.4	0.308	7	ug/Kg		06/18/19	LZ	
4-Isopropyltoluene	ND	1.4	0.378	7	ug/Kg		06/18/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1.4	0.238	7	ug/Kg		06/18/19	LZ	
Acetone	**260**	1.4	70	140	ug/Kg		06/18/19	LZ	
Allyl Chloride	ND	1.4	0.196	7	ug/Kg		06/18/19	LZ	
Benzene	**0.83 J**	1.4	0.252	7	ug/Kg		06/18/19	LZ	
Bromobenzene	ND	1.4	0.42	7	ug/Kg		06/18/19	LZ	
Bromochloromethane	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
Bromodichloromethane	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
Bromoform	ND	1.4	0.266	7	ug/Kg		06/18/19	LZ	
Bromomethane	ND	1.4	0.308	7	ug/Kg		06/18/19	LZ	
Carbon Tetrachloride	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
Chlorobenzene	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
Chlorodibromomethane	ND	1.4	0.266	7	ug/Kg		06/18/19	LZ	
Chloroethane	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
Chloroform	ND	1.4	0.238	7	ug/Kg		06/18/19	LZ	
Chloromethane	ND	1.4	0.294	7	ug/Kg		06/18/19	LZ	
cis-1,2-Dichloroethene	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
cis-1,3-dichloropropene	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
cis-1,4-dichloro-2-butene	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
Dibromomethane	ND	1.4	0.294	7	ug/Kg		06/18/19	LZ	
Dichlorodifluoromethane	ND	1.4	0.322	7	ug/Kg		06/18/19	LZ	
Di-isopropyl ether (DIPE)	ND	1.4	0.294	7	ug/Kg		06/18/19	LZ	
Ethylbenzene	**0.35 J**	1.4	0.322	7	ug/Kg		06/18/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1.4	0.588	7	ug/Kg		06/18/19	LZ	
Hexachlorobutadiene	ND	1.4	0.588	7	ug/Kg		06/18/19	LZ	
Isopropylbenzene	ND	1.4	0.35	7	ug/Kg		06/18/19	LZ	
m and p-Xylene	**1.4 J**	1.4	0.532	7	ug/Kg		06/18/19	LZ	
Methylene chloride	ND	1.4	0.294	7	ug/Kg		06/18/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1.4	0.238	7	ug/Kg		06/18/19	LZ	
Naphthalene	ND	1.4	0.224	7	ug/Kg		06/18/19	LZ	
N-butylbenzene	ND	1.4	0.35	7	ug/Kg		06/18/19	LZ	
N-propylbenzene	ND	1.4	0.308	7	ug/Kg		06/18/19	LZ	
o-Xylene	**0.43 J**	1.4	0.266	7	ug/Kg		06/18/19	LZ	
Sec-butylbenzene	ND	1.4	0.392	7	ug/Kg		06/18/19	LZ	
Styrene	ND	1.4	0.182	7	ug/Kg		06/18/19	LZ	
t-Butyl alcohol (TBA)	ND	1.4	12.32	14	ug/Kg		06/18/19	LZ	
Tert-amylmethylether (TAME)	ND	1.4	0.266	7	ug/Kg		06/18/19	LZ	
Tert-butylbenzene	ND	1.4	0.476	7	ug/Kg		06/18/19	LZ	
Tetrachloroethene	ND	1.4	0.322	7	ug/Kg		06/18/19	LZ	
Toluene	**1.5 J**	1.4	0.238	7	ug/Kg		06/18/19	LZ	
trans-1,2-dichloroethene	ND	1.4	0.266	7	ug/Kg		06/18/19	LZ	
trans-1,3-dichloropropene	ND	1.4	0.252	7	ug/Kg		06/18/19	LZ	
trans-1,4-dichloro-2-butene	ND	1.4	0.28	7	ug/Kg		06/18/19	LZ	
Trichloroethene	ND	1.4	0.322	7	ug/Kg		06/18/19	LZ	
Trichlorofluoromethane	ND	1.4	0.322	7	ug/Kg		06/18/19	LZ	
Vinyl Chloride	ND	1.4	0.196	7	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:17	**Site:**			
Sample #:	**416329-023**	**Client Sample #:**	B86-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Xylenes (Total)	**1.83 J**	1.4	0.532	7	ug/Kg		06/18/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*116*	*70-145*	
4-Bromofluorobenzene (SUR)	*83*	*70-145*	
Dibromofluoromethane (SUR)	*95*	*70-145*	
Toluene-d8 (SUR)	*92*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:20	**Site:**			
Sample #:	**416329-024**	**Client Sample #:**	B86-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**15.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**17.8**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.96	0.22944	2.88	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*105*	*60-140*	

Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203546	
TPH Diesel	ND	1	10	10	mg/Kg		06/26/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg		06/26/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*135*	*50-150*	

Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*72*	*50-150*	

Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203262	
1,1,1,2-Tetrachloroethane	ND	1.2	0.288	6	ug/Kg		06/18/19	LZ	
1,1,1-Trichloroethane	ND	1.2	0.18	6	ug/Kg		06/18/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1.2	0.348	6	ug/Kg		06/18/19	LZ	
1,1,2-Trichloroethane	ND	1.2	0.264	6	ug/Kg		06/18/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1.2	0.888	6	ug/Kg		06/18/19	LZ	
1,1-Dichloroethane	ND	1.2	0.276	6	ug/Kg		06/18/19	LZ	
1,1-Dichloroethene	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
1,1-Dichloropropene	ND	1.2	0.252	6	ug/Kg		06/18/19	LZ	
1,2,3-Trichlorobenzene	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
1,2,3-Trichloropropane	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
1,2,4-Trichlorobenzene	ND	1.2	0.396	6	ug/Kg		06/18/19	LZ	
1,2,4-Trimethylbenzene	ND	1.2	0.336	6	ug/Kg		06/18/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
1,2-Dibromoethane	ND	1.2	0.144	6	ug/Kg		06/18/19	LZ	
1,2-Dichlorobenzene	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
1,2-Dichloroethane	ND	1.2	0.168	6	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:20	**Site:**			
Sample #:	**416329-024**	**Client Sample #:**	B86-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2-Dichloropropane	ND	1.2	0.408	6	ug/Kg		06/18/19	LZ	
1,3,5-Trimethylbenzene	ND	1.2	0.276	6	ug/Kg		06/18/19	LZ	
1,3-Dichlorobenzene	ND	1.2	0.252	6	ug/Kg		06/18/19	LZ	
1,3-Dichloropropane	ND	1.2	0.228	6	ug/Kg		06/18/19	LZ	
1,4-Dichlorobenzene	ND	1.2	0.288	6	ug/Kg		06/18/19	LZ	
2,2-Dichloropropane	ND	1.2	0.228	6	ug/Kg		06/18/19	LZ	
2-Butanone (MEK)	**14 J**	1.2	0.864	120	ug/Kg		06/18/19	LZ	
2-Chlorotoluene	ND	1.2	0.3	6	ug/Kg		06/18/19	LZ	
4-Chlorotoluene	ND	1.2	0.264	6	ug/Kg		06/18/19	LZ	
4-Isopropyltoluene	ND	1.2	0.324	6	ug/Kg		06/18/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1.2	0.204	6	ug/Kg		06/18/19	LZ	
Acetone	**170**	1.2	60	120	ug/Kg		06/18/19	LZ	
Allyl Chloride	ND	1.2	0.168	6	ug/Kg		06/18/19	LZ	
Benzene	**0.55 J**	1.2	0.216	6	ug/Kg		06/18/19	LZ	
Bromobenzene	ND	1.2	0.36	6	ug/Kg		06/18/19	LZ	
Bromochloromethane	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
Bromodichloromethane	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
Bromoform	ND	1.2	0.228	6	ug/Kg		06/18/19	LZ	
Bromomethane	ND	1.2	0.264	6	ug/Kg		06/18/19	LZ	
Carbon Tetrachloride	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
Chlorobenzene	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
Chlorodibromomethane	ND	1.2	0.228	6	ug/Kg		06/18/19	LZ	
Chloroethane	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
Chloroform	ND	1.2	0.204	6	ug/Kg		06/18/19	LZ	
Chloromethane	ND	1.2	0.252	6	ug/Kg		06/18/19	LZ	
cis-1,2-Dichloroethene	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
cis-1,3-dichloropropene	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
cis-1,4-dichloro-2-butene	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
Dibromomethane	ND	1.2	0.252	6	ug/Kg		06/18/19	LZ	
Dichlorodifluoromethane	ND	1.2	0.276	6	ug/Kg		06/18/19	LZ	
Di-isopropyl ether (DIPE)	ND	1.2	0.252	6	ug/Kg		06/18/19	LZ	
Ethylbenzene	**0.31 J**	1.2	0.276	6	ug/Kg		06/18/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1.2	0.504	6	ug/Kg		06/18/19	LZ	
Hexachlorobutadiene	ND	1.2	0.504	6	ug/Kg		06/18/19	LZ	
Isopropylbenzene	ND	1.2	0.3	6	ug/Kg		06/18/19	LZ	
m and p-Xylene	**1.1 J**	1.2	0.456	6	ug/Kg		06/18/19	LZ	
Methylene chloride	ND	1.2	0.252	6	ug/Kg		06/18/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1.2	0.204	6	ug/Kg		06/18/19	LZ	
Naphthalene	ND	1.2	0.192	6	ug/Kg		06/18/19	LZ	
N-butylbenzene	ND	1.2	0.3	6	ug/Kg		06/18/19	LZ	
N-propylbenzene	ND	1.2	0.264	6	ug/Kg		06/18/19	LZ	
o-Xylene	**0.30 J**	1.2	0.228	6	ug/Kg		06/18/19	LZ	
Sec-butylbenzene	ND	1.2	0.336	6	ug/Kg		06/18/19	LZ	
Styrene	ND	1.2	0.156	6	ug/Kg		06/18/19	LZ	
t-Butyl alcohol (TBA)	ND	1.2	10.56	12	ug/Kg		06/18/19	LZ	
Tert-amylmethylether (TAME)	ND	1.2	0.228	6	ug/Kg		06/18/19	LZ	
Tert-butylbenzene	ND	1.2	0.408	6	ug/Kg		06/18/19	LZ	
Tetrachloroethene	ND	1.2	0.276	6	ug/Kg		06/18/19	LZ	
Toluene	**0.69 J**	1.2	0.204	6	ug/Kg		06/18/19	LZ	
trans-1,2-dichloroethene	ND	1.2	0.228	6	ug/Kg		06/18/19	LZ	
trans-1,3-dichloropropene	ND	1.2	0.216	6	ug/Kg		06/18/19	LZ	
trans-1,4-dichloro-2-butene	ND	1.2	0.24	6	ug/Kg		06/18/19	LZ	
Trichloroethene	ND	1.2	0.276	6	ug/Kg		06/18/19	LZ	
Trichlorofluoromethane	ND	1.2	0.276	6	ug/Kg		06/18/19	LZ	
Vinyl Chloride	ND	1.2	0.168	6	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:20	**Site:**			
Sample #:	**416329-024**	**Client Sample #:**	B86-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Xylenes (Total)	**1.4 J**	1.2	0.456	6	ug/Kg		06/18/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*95*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*78*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:24	**Site:**			
Sample #:	**416329-025**	**Client Sample #:**	B86-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**9.88**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**7.70**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.82	0.19598	2.46	mg/Kg		06/18/19	EW	
Surrogate	*% Recovery*		*Limits*		*Notes*				
4-Bromofluorobenzene (SUR)	*105*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*		*Notes*				
Triacontane (SUR)	*102*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	
Surrogate	*% Recovery*		*Limits*		*Notes*				
Decachlorobiphenyl DCB (SUR)	*83*		*50-150*						
Tetrachloro-m-xylene TCMX (SUR)	*75*		*50-150*						
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		06/18/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		06/18/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		06/18/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		06/18/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		06/18/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		06/18/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		06/18/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:24	**Site:**			
Sample #:	**416329-025**	**Client Sample #:**	B86-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		06/18/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		06/18/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
2-Butanone (MEK)	**4.5 J**	0.8	0.576	80	ug/Kg		06/18/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		06/18/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		06/18/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		06/18/19	LZ	
Acetone	**55 J**	0.8	40	80	ug/Kg		06/18/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		06/18/19	LZ	
Benzene	**0.20 J**	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		06/18/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		06/18/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
Ethylbenzene	**0.21 J**	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		06/18/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		06/18/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		06/18/19	LZ	
m and p-Xylene	**0.75 J**	0.8	0.304	4	ug/Kg		06/18/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		06/18/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		06/18/19	LZ	
Naphthalene	ND	0.8	0.128	4	ug/Kg		06/18/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		06/18/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		06/18/19	LZ	
o-Xylene	**0.22 J**	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		06/18/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		06/18/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		06/18/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		06/18/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Toluene	**0.52 J**	0.8	0.136	4	ug/Kg		06/18/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		06/18/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		06/18/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		06/18/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		06/18/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		06/18/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:24	**Site:**			
Sample #:	**416329-025**	**Client Sample #:**	B86-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Xylenes (Total)	**0.97 J**	0.8	0.304	4	ug/Kg		06/18/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*120*	*70-145*	
4-Bromofluorobenzene (SUR)	*79*	*70-145*	
Dibromofluoromethane (SUR)	*111*	*70-145*	
Toluene-d8 (SUR)	*90*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:36	**Site:**			
Sample #:	**416329-026**	**Client Sample #:**	B84-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**27.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**47.9**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*78*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*69*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:40	**Site:**			
Sample #:	**416329-027**	**Client Sample #:**	B84-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**15.6**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**8.48**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*70*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 09:42	**Site:**			
Sample #:	**416329-028**	**Client Sample #:**	B84-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**15.9**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Lead	**8.67**	1	0.128	0.5	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*86*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*75*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:04	**Site:**			
Sample #:	**416329-029**	**Client Sample #:**	B101-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**1.87 J**	1	0.37	3	mg/Kg	06/19/19	06/19/19	SBW	
Barium	**112**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.36**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**31.3**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.7**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**22.4**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**5.17**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.93**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**25.6**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**0.85 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**57.7**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**64.2**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**10.7**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.94	0.22466	2.82	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*107*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:04	**Site:**			
Sample #:	**416329-029**	**Client Sample #:**	B101-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Surrogate	*% Recovery*			*Limits*	*Notes*				
Decachlorobiphenyl DCB (SUR)	*82*			*50-150*					
Tetrachloro-m-xylene TCMX (SUR)	*74*			*50-150*					

Method: EPA 8082 *NELAC* Prep Method: EPA 3545 QCBatchID: QC1203277

PCB-1016	ND	1	3	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1221	ND	1	14	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1232	ND	1	9.5	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1242	ND	1	14	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1248	ND	1	19	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1254	ND	1	20	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1260	ND	1	6.9	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1262	ND	1	17	50	ug/Kg	06/18/19	06/19/19	SS
PCB-1268	ND	1	8.6	50	ug/Kg	06/18/19	06/19/19	SS

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:05	**Site:**			
Sample #:	**416329-030**	**Client Sample #:**	B101-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**0.55 J**	1	0.37	3	mg/Kg	06/19/19	06/19/19	SBW	
Barium	**134**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.45**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**31.0**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.9**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**24.0**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**9.14**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.22**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**26.0**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**2.13 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**56.4**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**87.7**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**9.96**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.86	0.20554	2.58	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	2	20	20	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	2	40	40	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*106*	*50-150*	

Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:05	**Site:**			
Sample #:	**416329-030**	**Client Sample #:**	B101-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*57*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*53*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:10	**Site:**			
Sample #:	**416329-031**	**Client Sample #:**	B101-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**1.49 J**	1	0.37	3	mg/Kg	06/19/19	06/19/19	SBW	
Barium	**110**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.24**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**31.3**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.5**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**21.7**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**3.42**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.57**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**24.7**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**2.59 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**57.5**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**60.3**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**10.1**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.93	0.22227	2.79	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*109*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:10	**Site:**			
Sample #:	**416329-031**	**Client Sample #:**	B101-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*69*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*61*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:12	**Site:**			
Sample #:	**416329-032**	**Client Sample #:**	B101-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**3.53**	1	0.37	3	mg/Kg	06/19/19	06/19/19	SBW	
Barium	**127**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.62**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**40.9**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**11.7**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**26.4**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**4.34**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.28**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**31.4**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.36 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**76.6**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**68.5**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203303	
Arsenic	**13.5**	1	0.108	0.3	mg/Kg	06/18/19	06/19/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.88	0.21032	2.64	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*106*	*50-150*	

Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:12	**Site:**			
Sample #:	**416329-032**	**Client Sample #:**	B101-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*78*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*73*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:15	**Site:**			
Sample #:	**416329-033**	**Client Sample #:**	B102-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**3.22**	1	0.37	3	mg/Kg	06/19/19	06/19/19	SBW	
Barium	**118**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.95**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**37.1**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**12.3**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**27.8**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**13.7**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.59**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**30.8**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	ND	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	
Vanadium	**67.1**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**84.2**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**10.7**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.89	0.21271	2.67	mg/Kg		06/18/19	EW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
4-Bromofluorobenzene (SUR)	*105*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	2	20	20	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	2	40	40	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
Triacontane (SUR)	*111*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	**11**	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	**17**	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	**250**	10	20	50	ug/Kg	06/18/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	**140**	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	**28**	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	**3.9 J**	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:15	**Site:**			
Sample #:	**416329-033**	**Client Sample #:**	B102-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*85*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*76*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:19	**Site:**			
Sample #:	**416329-035**	**Client Sample #:**	B102-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**0.56 J**	1	0.37	3	mg/Kg	06/19/19	06/19/19	SBW	
Barium	**173**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.31**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**35.0**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.6**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**26.2**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**47.3**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**1.60**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**26.6**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**2.02 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**61.3**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**106**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**11.2**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.78	0.18642	2.34	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*105*	*60-140*	

Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*112*	*50-150*	

Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	**17**	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	**8.2**	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	**53**	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	**11**	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:19	**Site:**			
Sample #:	**416329-035**	**Client Sample #:**	B102-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*79*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*77*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:21	**Site:**			
Sample #:	**416329-036**	**Client Sample #:**	B102-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**2.54 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**118**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.52**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**37.9**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**12.1**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**25.8**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**4.75**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**1.98**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**31.1**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.51 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**65.0**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**66.4**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**13.8**	2	0.216	0.6	mg/Kg	06/18/19	06/21/19		
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.86	0.20554	2.58	mg/Kg		06/18/19	EW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
4-Bromofluorobenzene (SUR)	*105*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
Triacontane (SUR)	*128*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:21	**Site:**			
Sample #:	**416329-036**	**Client Sample #:**	B102-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*77*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*75*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:40	**Site:**			
Sample #:	**416329-037**	**Client Sample #:**	B100-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**2.09 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**98.6**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.83**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**32.6**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.9**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**23.5**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**3.69**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.24**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**31.6**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**2.03 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**61.7**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**60.0**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**11.7**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.86	0.20554	2.58	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*105*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*106*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:40	**Site:**			
Sample #:	**416329-037**	**Client Sample #:**	B100-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*67*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*65*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:43	**Site:**			
Sample #:	**416329-038**	**Client Sample #:**	B100-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**1.13 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**202**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.70**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**41.9**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**13.4**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**29.1**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**4.76**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.09**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**33.2**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**2.22 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**83.4**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**67.1**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**11.6**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	1.02	0.24378	3.06	mg/Kg		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*105*	*60-140*	

Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*114*	*50-150*	

Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:43	**Site:**			
Sample #:	**416329-038**	**Client Sample #:**	B100-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*72*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*69*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:45	**Site:**			
Sample #:	**416329-039**	**Client Sample #:**	B100-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**0.54 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**136**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.67**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**41.6**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**12.9**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**27.9**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**4.37**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**1.96**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**32.9**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.09 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**80.1**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**67.1**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**14.1**	2	0.216	0.6	mg/Kg	06/18/19	06/21/19		
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203219	
TPH Gasoline	ND	0.96	0.22944	2.88	mg/Kg		06/20/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*105*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*127*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/19/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/19/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/19/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/19/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/19/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/19/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/19/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/19/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/19/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/19/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:45	**Site:**			
Sample #:	**416329-039**	**Client Sample #:**	B100-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*73*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:55	**Site:**			
Sample #:	**416329-040**	**Client Sample #:**	B99-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**2.34 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**120**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.31**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**32.5**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**11.1**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**27.2**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Lead	**19.9**	1	0.32	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.25**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**26.5**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.52 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**60.0**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**83.4**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**12.2**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203219	
TPH Gasoline	ND	0.96	0.22944	2.88	mg/Kg		06/20/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*100*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*121*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/20/19	SS	
4,4'-DDE	**2.2 J**	1	2	5	ug/Kg	06/18/19	06/20/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/20/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/20/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/20/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:55	**Site:**			
Sample #:	**416329-040**	**Client Sample #:**	B99-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*79*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*81*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:55	**Site:**			
Sample #:	**416329-041**	**Client Sample #:**	B99-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**0.70 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**119**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.11**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**31.4**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.6**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**23.9**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.07**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**24.8**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.00 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**56.6**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**82.2**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**12.0**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**28.2**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5030							QCBatchID:	QC1203219	
TPH Gasoline	ND	1	0.239	3	mg/Kg		06/20/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*90*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	**11**	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*124*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203276	
4,4'-DDD	**4.1 J**	1	2.1	5	ug/Kg	06/18/19	06/20/19	SS	
4,4'-DDE	**27**	1	2	5	ug/Kg	06/18/19	06/20/19	SS	
4,4'-DDT	**51**	1	2	5	ug/Kg	06/18/19	06/20/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/20/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/20/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/20/19	SS	
Chlordane (technical)	**94**	1	35	50	ug/Kg	06/18/19	06/20/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/20/19	SS	
Dieldrin	**9.9**	1	2.1	5	ug/Kg	06/18/19	06/20/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/20/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/20/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/20/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/20/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/20/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/20/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/20/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/20/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/20/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/20/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/20/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:55	**Site:**			
Sample #:	**416329-041**	**Client Sample #:**	B99-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*73*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*73*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:57	**Site:**			
Sample #:	**416329-042**	**Client Sample #:**	B99-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**2.24 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**212**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.72**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**42.5**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**13.6**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**29.6**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.13**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**34.8**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**2.27 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**80.7**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**71.8**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**11.8**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**10.5**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5030							QCBatchID:	QC1203219	
TPH Gasoline	ND	1	0.239	3	mg/Kg		06/20/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*90*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*120*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	**64**	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 10:57	**Site:**			
Sample #:	**416329-042**	**Client Sample #:**	B99-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*95*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*86*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:00	**Site:**			
Sample #:	**416329-043**	**Client Sample #:**	B99-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**2.92 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**134**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.73**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**46.6**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**12.5**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**31.0**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.24**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**35.1**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.70 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**92.1**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**71.5**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**11.5**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**6.70**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.82	0.19598	2.46	mg/Kg		06/18/19	EW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
4-Bromofluorobenzene (SUR)	*100*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
Triacontane (SUR)	*112*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:00	**Site:**			
Sample #:	**416329-043**	**Client Sample #:**	B99-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*98*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*79*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:20	**Site:**			
Sample #:	**416329-044**	**Client Sample #:**	B98-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**1.10 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**120**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.23**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**30.4**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**10.6**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**25.1**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**1.78**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**25.3**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**0.47 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**55.0**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**89.7**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**12.8**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**31.3**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	**0.04 J**	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5030							QCBatchID:	QC1203219	
TPH Gasoline	ND	1	0.239	3	mg/Kg		06/20/19	EW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
4-Bromofluorobenzene (SUR)	*95*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
Triacontane (SUR)	*120*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	**7.4**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	**7.9**	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:20	**Site:**			
Sample #:	**416329-044**	**Client Sample #:**	B98-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*101*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*89*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:22	**Site:**			
Sample #:	**416329-045**	**Client Sample #:**	B98-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**1.53 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**117**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.54**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**41.8**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**13.1**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**29.6**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**1.92**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**33.2**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**1.29 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**70.0**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**68.8**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**12.4**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**7.61**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5030							QCBatchID:	QC1203219	
TPH Gasoline	ND	1	0.239	3	mg/Kg		06/20/19	EW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
4-Bromofluorobenzene (SUR)	*95*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
Triacontane (SUR)	*119*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:22	**Site:**			
Sample #:	**416329-045**	**Client Sample #:**	B98-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*103*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*97*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:27	**Site:**			
Sample #:	**416329-046**	**Client Sample #:**	B98-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203337	
Antimony	**1.77 J**	1	0.37	3	mg/Kg	06/19/19	06/20/19	SBW	
Barium	**138**	1	0.23	1	mg/Kg	06/19/19	06/19/19	SBW	
Beryllium	ND	1	0.17	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Cadmium	**2.55**	1	0.21	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Chromium	**38.9**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Cobalt	**11.5**	1	0.19	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Copper	**28.8**	1	0.31	1	mg/Kg	06/19/19	06/19/19	SBW	
Molybdenum	**2.15**	1	0.13	1	mg/Kg	06/19/19	06/19/19	SBW	
Nickel	**31.1**	1	0.2	1.5	mg/Kg	06/19/19	06/19/19	SBW	
Selenium	ND	1	0.72	3	mg/Kg	06/19/19	06/19/19	SBW	
Silver	ND	1	0.13	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Thallium	**0.83 J**	1	0.42	3	mg/Kg	06/19/19	06/20/19	SBW	J
Vanadium	**77.8**	1	0.37	0.5	mg/Kg	06/19/19	06/19/19	SBW	
Zinc	**74.2**	1	0.28	5	mg/Kg	06/19/19	06/19/19	SBW	
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**13.7**	2	0.216	0.6	mg/Kg	06/18/19	06/21/19	SBW	
Lead	**9.58**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID:	QC1203402	
Mercury	ND	1	0.039	0.14	mg/Kg	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1203293	
TPH Gasoline	ND	0.94	0.22466	2.82	mg/Kg		06/18/19	EW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
4-Bromofluorobenzene (SUR)	*105*		*60-140*						
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID:	QC1203613	
TPH Diesel	ND	1	10	10	mg/Kg	06/26/19	06/28/19	TW	
TPH Motor Oil	ND	1	20	20	mg/Kg	06/26/19	06/28/19	TW	
Surrogate	*% Recovery*		*Limits*	*Notes*					
Triacontane (SUR)	*122*		*50-150*						
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	**4.8 J**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	**6.2**	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:27	**Site:**			
Sample #:	**416329-046**	**Client Sample #:**	B98-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*104*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*89*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:39	**Site:**			
Sample #:	**416329-047**	**Client Sample #:**	B109-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1203304	
Arsenic	**5.22**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**25.8**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	**4.6 J**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*101*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*93*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:40	**Site:**			
Sample #:	**416329-048**	**Client Sample #:**	B109-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**3.99**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**24.2**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203448	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/21/19	06/23/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/21/19	06/23/19	SS	
4,4'-DDT	**8.3**	1	2	5	ug/Kg	06/21/19	06/23/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/21/19	06/23/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/21/19	06/23/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/21/19	06/23/19	SS	
Chlordane (technical)	ND	1		50	ug/Kg	06/21/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/21/19	06/23/19	SS	
Dieldrin	**5.3**	1	2.1	5	ug/Kg	06/21/19	06/23/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/21/19	06/23/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/21/19	06/23/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/21/19	06/23/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/21/19	06/23/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/21/19	06/23/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/21/19	06/23/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/21/19	06/23/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/21/19	06/23/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/21/19	06/23/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/21/19	06/23/19	SS	
Toxaphene	ND	1		100	ug/Kg	06/21/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*56*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*63*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:42	**Site:**			
Sample #:	**416329-049**	**Client Sample #:**	B109-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**11.6**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**6.59**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*99*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*94*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:49	**Site:**			
Sample #:	**416329-050**	**Client Sample #:**	B108-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**4.75**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**17.5**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*103*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*102*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:51	**Site:**			
Sample #:	**416329-051**	**Client Sample #:**	B108-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**14.2**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**26.9**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203448	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/21/19	06/23/19	SS	
4,4'-DDE	**2.5 J**	1	2	5	ug/Kg	06/21/19	06/23/19	SS	
4,4'-DDT	**4.3 J**	1	2	5	ug/Kg	06/21/19	06/23/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/21/19	06/23/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/21/19	06/23/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/21/19	06/23/19	SS	
Chlordane (technical)	**190**	1	35	50	ug/Kg	06/21/19	06/23/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/21/19	06/23/19	SS	
Dieldrin	**16**	1	2.1	5	ug/Kg	06/21/19	06/23/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/21/19	06/23/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/21/19	06/23/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/21/19	06/23/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/21/19	06/23/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/21/19	06/23/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/21/19	06/23/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/21/19	06/23/19	SS	
Heptachlor epoxide	**2.4 J**	1	2.3	5	ug/Kg	06/21/19	06/23/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/21/19	06/23/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/21/19	06/23/19	SS	
Toxaphene	ND	1		100	ug/Kg	06/21/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*45*	*50-150*	*S*
Tetrachloro-m-xylene TCMX (SUR)	*55*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:53	**Site:**			
Sample #:	**416329-052**	**Client Sample #:**	B108-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203304	
Arsenic	**10.5**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**6.23**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*82*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*77*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:59	**Site:**			
Sample #:	**416329-053**	**Client Sample #:**	B107-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**8.86**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**37.2**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*90*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*130*	*50-150*	

Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203295	
PCB-1016	ND	1	3	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*75*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 11:59	**Site:**			
Sample #:	**416329-054**	**Client Sample #:**	B107-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203449	
PCB-1016	ND	1	3	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/21/19	06/23/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/21/19	06/23/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*63*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:01	**Site:**			
Sample #:	**416329-055**	**Client Sample #:**	B107-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**12.6**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**8.66**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*94*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*78*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:06	**Site:**			
Sample #:	**416329-056**	**Client Sample #:**	B107-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**10.8**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**6.42**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*100*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*99*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:10	**Site:**			
Sample #:	**416329-057**	**Client Sample #:**	B106-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**5.45**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**18.2**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*86*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*89*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:12	**Site:**			
Sample #:	**416329-058**	**Client Sample #:**	B106-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**11.6**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**12.6**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	**4.5 J**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	**2.7 J**	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*88*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*89*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:14	**Site:**			
Sample #:	**416329-059**	**Client Sample #:**	B106-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**10.8**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**20.2**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	**5.3**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*90*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*76*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:20	**Site:**			
Sample #:	**416329-060**	**Client Sample #:**	B105-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**4.24**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**7.53**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*97*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*87*	*50-150*	

Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203295	
PCB-1016	ND	1	3	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*72*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:20	**Site:**			
Sample #:	**416329-061**	**Client Sample #:**	B105-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**12.7**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**18.5**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*61*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*60*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:23	**Site:**			
Sample #:	**416329-062**	**Client Sample #:**	B105-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**10.3**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**7.55**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*87*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*85*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:24	**Site:**			
Sample #:	**416329-063**	**Client Sample #:**	B105-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**6.32**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**13.7**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*85*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*78*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:28	**Site:**			
Sample #:	**416329-064**	**Client Sample #:**	B104-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**7.40**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**26.0**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*91*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*88*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:30	**Site:**			
Sample #:	**416329-065**	**Client Sample #:**	B104-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**11.0**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**38.2**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*82*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*85*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:32	**Site:**			
Sample #:	**416329-066**	**Client Sample #:**	B104-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**2.56**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**12.0**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*91*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*84*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:35	**Site:**			
Sample #:	**416329-067**	**Client Sample #:**	B103-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**12.8**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**24.5**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203294	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDE	**3.0 J**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
4,4'-DDT	**3.6 J**	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/18/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/18/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/18/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/18/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/18/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/18/19	06/21/19	SS	L
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/18/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/18/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/18/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/18/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*85*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*77*	*50-150*	

Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203295	
PCB-1016	ND	1	3	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1221	ND	1	14	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1232	ND	1	9.5	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1242	ND	1	14	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1248	ND	1	19	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1254	ND	1	20	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1260	ND	1	6.9	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1262	ND	1	17	50	ug/Kg	06/18/19	06/21/19	SS	
PCB-1268	ND	1	8.6	50	ug/Kg	06/18/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*58*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:35	**Site:**			
Sample #:	**416329-068**	**Client Sample #:**	B103-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**5.36**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*85*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*82*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:37	**Site:**			
Sample #:	**416329-069**	**Client Sample #:**	B103-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**10.0**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**19.9**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	**3.2 J**	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	**2.3 J**	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*83*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*84*	*50-150*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 12:39	**Site:**			
Sample #:	**416329-070**	**Client Sample #:**	B103-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC* Prep Method: EPA 3050B							QCBatchID:	QC1203305	
Arsenic	**8.82**	1	0.108	0.3	mg/Kg	06/18/19	06/20/19	SBW	
Lead	**21.9**	1	0.128	0.5	mg/Kg	06/18/19	06/20/19	SBW	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID:	QC1203340	
4,4'-DDD	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDE	**2.4 J**	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
4,4'-DDT	**2.1 J**	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
a-BHC	ND	1	1.6	5	ug/Kg	06/19/19	06/21/19	SS	
Aldrin	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
b-BHC	ND	1	1.5	5	ug/Kg	06/19/19	06/21/19	SS	
Chlordane (technical)	ND	1	35	50	ug/Kg	06/19/19	06/21/19	SS	
d-BHC	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Dieldrin	**2.8 J**	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan I	ND	1	1.2	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan II	ND	1	2.8	5	ug/Kg	06/19/19	06/21/19	SS	
Endosulfan sulfate	ND	1	3.4	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin	ND	1	2.7	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin aldehyde	ND	1	2.1	5	ug/Kg	06/19/19	06/21/19	SS	
Endrin Ketone	ND	1	4.1	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor	ND	1	1.3	5	ug/Kg	06/19/19	06/21/19	SS	
Heptachlor epoxide	ND	1	2.3	5	ug/Kg	06/19/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	2	5	ug/Kg	06/19/19	06/21/19	SS	
Methoxychlor	ND	1	9.2	10	ug/Kg	06/19/19	06/21/19	SS	
Toxaphene	ND	1	54	100	ug/Kg	06/19/19	06/21/19	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*87*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*82*	*50-150*	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 13:15	**Site:**			
Sample #:	**416329-071**	**Client Sample #:**	EB-03	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3010A							QCBatchID:	QC1203350	
Antimony	ND	1	0.014	0.04	mg/L	06/19/19	06/21/19	KLN	
Barium	ND	1	0.002	0.01	mg/L	06/19/19	06/20/19	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	06/19/19	06/20/19	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	06/19/19	06/20/19	KLN	
Chromium	ND	1	0.002	0.01	mg/L	06/19/19	06/20/19	KLN	
Cobalt	ND	1	0.001	0.005	mg/L	06/19/19	06/20/19	KLN	
Copper	ND	1	0.004	0.01	mg/L	06/19/19	06/20/19	KLN	
Molybdenum	ND	1	0.005	0.01	mg/L	06/19/19	06/20/19	KLN	
Nickel	ND	1	0.003	0.02	mg/L	06/19/19	06/20/19	KLN	
Selenium	ND	1	0.016	0.03	mg/L	06/19/19	06/20/19	KLN	
Silver	ND	1	0.003	0.005	mg/L	06/19/19	06/21/19	KLN	
Thallium	ND	1	0.009	0.05	mg/L	06/19/19	06/20/19	KLN	
Vanadium	ND	1	0.002	0.005	mg/L	06/19/19	06/20/19	KLN	
Zinc	ND	1	0.007	0.05	mg/L	06/19/19	06/20/19	KLN	
Method: EPA 6020 *NELAC* Prep Method: EPA 3010A							QCBatchID:	QC1203360	
Arsenic	ND	1	0.31	2	ug/L	06/19/19	06/20/19	SBW	
Lead	ND	1	0.76	5	ug/L	06/19/19	06/20/19	SBW	
Method: EPA 7470A *NELAC* Prep Method: Method							QCBatchID:	QC1203420	
Mercury	ND	1	0.094	0.4	ug/L	06/20/19	06/20/19	JP	
Method: EPA 8015B *NELAC* Prep Method: EPA 3510C							QCBatchID:	QC1203649	
TPH Diesel	**0.07 J**	1	0.04	0.1	mg/L	06/27/19	06/27/19	TW	B1,J,T
TPH Motor Oil	ND	1	0.07	0.3	mg/L	06/27/19	06/27/19	TW	T

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*110*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B *NELAC* Prep Method: EPA 5030B							QCBatchID:	QC1203176	
TPH Gasoline	ND	1	16	50	ug/L		06/18/19	EW	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*107*	*60-140*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3510C							QCBatchID:	QC1203440	
4,4'-DDD	ND	1	0.011	0.1	ug/L	06/21/19	06/21/19	SS	
4,4'-DDE	ND	1	0.006	0.1	ug/L	06/21/19	06/21/19	SS	
4,4'-DDT	ND	1	0.011	0.1	ug/L	06/21/19	06/21/19	SS	
a-BHC	ND	1	0.002	0.1	ug/L	06/21/19	06/21/19	SS	
Aldrin	ND	1	0.007	0.1	ug/L	06/21/19	06/21/19	SS	
b-BHC	ND	1	0.003	0.1	ug/L	06/21/19	06/21/19	SS	
Chlordane (technical)	ND	1	0.27	1	ug/L	06/21/19	06/21/19	SS	
d-BHC	ND	1	0.006	0.1	ug/L	06/21/19	06/21/19	SS	
Dieldrin	ND	1	0.006	0.1	ug/L	06/21/19	06/21/19	SS	
Endosulfan I	ND	1	0.004	0.1	ug/L	06/21/19	06/21/19	SS	
Endosulfan II	ND	1	0.011	0.1	ug/L	06/21/19	06/21/19	SS	
Endosulfan sulfate	ND	1	0.012	0.1	ug/L	06/21/19	06/21/19	SS	
Endrin	ND	1	0.008	0.1	ug/L	06/21/19	06/21/19	SS	
Endrin aldehyde	ND	1	0.009	0.1	ug/L	06/21/19	06/21/19	SS	
Endrin Ketone	ND	1	0.011	0.1	ug/L	06/21/19	06/21/19	SS	L
Heptachlor	ND	1	0.003	0.1	ug/L	06/21/19	06/21/19	SS	
Heptachlor epoxide	ND	1	0.002	0.1	ug/L	06/21/19	06/21/19	SS	
Lindane (Gamma-BHC)	ND	1	0.002	0.1	ug/L	06/21/19	06/21/19	SS	
Methoxychlor	ND	1	0.055	0.1	ug/L	06/21/19	06/21/19	SS	
Toxaphene	ND	1	0.48	2	ug/L	06/21/19	06/21/19	SS	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 13:15	**Site:**			
Sample #:	**416329-071**	**Client Sample #:**	EB-03	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Surrogate	*% Recovery*		*Limits*		*Notes*				
Decachlorobiphenyl DCB (SUR)	*55*		*50-150*						
Tetrachloro-m-xylene TCMX (SUR)	*54*		*50-150*						
Method: EPA 8082 *NELAC* Prep Method: EPA 3510C							QCBatchID:	QC1203441	
PCB-1016	ND	1	0.058	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1221	ND	1	0.253	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1232	ND	1	0.196	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1242	ND	1	0.169	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1248	ND	1	0.1	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1254	ND	1	0.054	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1260	ND	1	0.08	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1262	ND	1	0.045	0.5	ug/L	06/21/19	06/21/19	SS	
PCB-1268	ND	1	0.062	0.5	ug/L	06/21/19	06/21/19	SS	
Surrogate	*% Recovery*		*Limits*		*Notes*				
Decachlorobiphenyl DCB (SUR)	*57*		*50-150*						
Method: EPA 8260B *NELAC* Prep Method: EPA 5030B							QCBatchID:	QC1203265	
1,1,1,2-Tetrachloroethane	ND	1	0.25	5	ug/L		06/18/19	LZ	
1,1,1-Trichloroethane	ND	1	0.38	5	ug/L		06/18/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.25	5	ug/L		06/18/19	LZ	
1,1,2-Trichloroethane	ND	1	0.25	5	ug/L		06/18/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.29	5	ug/L		06/18/19	LZ	
1,1-Dichloroethane	ND	1	0.32	5	ug/L		06/18/19	LZ	
1,1-Dichloroethene	ND	1	0.3	5	ug/L		06/18/19	LZ	
1,1-Dichloropropene	ND	1	0.25	5	ug/L		06/18/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.28	5	ug/L		06/18/19	LZ	
1,2,3-Trichloropropane	ND	1	0.16	5	ug/L		06/18/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.27	5	ug/L		06/18/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/L		06/18/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.12	5	ug/L		06/18/19	LZ	
1,2-Dibromoethane	ND	1	0.19	5	ug/L		06/18/19	LZ	
1,2-Dichlorobenzene	ND	1	0.26	5	ug/L		06/18/19	LZ	
1,2-Dichloroethane	ND	1	0.2	5	ug/L		06/18/19	LZ	
1,2-Dichloropropane	ND	1	0.36	5	ug/L		06/18/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.24	5	ug/L		06/18/19	LZ	
1,3-Dichlorobenzene	ND	1	0.34	5	ug/L		06/18/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/L		06/18/19	LZ	
1,4-Dichlorobenzene	ND	1	0.43	5	ug/L		06/18/19	LZ	
2,2-Dichloropropane	ND	1	0.32	5	ug/L		06/18/19	LZ	
2-Butanone (MEK)	ND	1	0.78	100	ug/L		06/18/19	LZ	
2-Chlorotoluene	ND	1	0.33	5	ug/L		06/18/19	LZ	
4-Chlorotoluene	ND	1	0.31	5	ug/L		06/18/19	LZ	
4-Isopropyltoluene	ND	1	0.32	5	ug/L		06/18/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.12	5	ug/L		06/18/19	LZ	
Acetone	ND	1	50	100	ug/L		06/18/19	LZ	
Allyl Chloride	ND	1	0.19	5	ug/L		06/18/19	LZ	
Benzene	ND	1	0.18	1	ug/L		06/18/19	LZ	
Bromobenzene	ND	1	0.53	5	ug/L		06/18/19	LZ	
Bromochloromethane	ND	1	0.17	5	ug/L		06/18/19	LZ	
Bromodichloromethane	ND	1	0.31	5	ug/L		06/18/19	LZ	
Bromoform	ND	1	0.13	5	ug/L		06/18/19	LZ	
Bromomethane	ND	1	0.68	5	ug/L		06/18/19	LZ	
Carbon Tetrachloride	ND	1	0.27	5	ug/L		06/18/19	LZ	
Chlorobenzene	ND	1	0.19	5	ug/L		06/18/19	LZ	
Chlorodibromomethane	ND	1	0.21	5	ug/L		06/18/19	LZ	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	06/14/2019 13:15	**Site:**			
Sample #:	**416329-071**	**Client Sample #:**	EB-03	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Chloroethane	ND	1	0.45	5	ug/L		06/18/19	LZ	
Chloroform	ND	1	0.18	5	ug/L		06/18/19	LZ	
Chloromethane	ND	1	0.27	5	ug/L		06/18/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.27	5	ug/L		06/18/19	LZ	
cis-1,3-dichloropropene	ND	1	0.25	5	ug/L		06/18/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		06/18/19	LZ	
Dibromomethane	ND	1	0.23	5	ug/L		06/18/19	LZ	
Dichlorodifluoromethane	ND	1	0.33	5	ug/L		06/18/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.17	1	ug/L		06/18/19	LZ	
Ethylbenzene	ND	1	0.21	5	ug/L		06/18/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.23	1	ug/L		06/18/19	LZ	
Hexachlorobutadiene	ND	1	0.51	5	ug/L		06/18/19	LZ	
Isopropylbenzene	ND	1	0.24	5	ug/L		06/18/19	LZ	
m and p-Xylene	ND	1	0.45	5	ug/L		06/18/19	LZ	
Methylene chloride	**1.5 J**	1	0.16	5	ug/L		06/18/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L		06/18/19	LZ	
Naphthalene	ND	1	0.25	5	ug/L		06/18/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/L		06/18/19	LZ	
N-propylbenzene	ND	1	0.31	5	ug/L		06/18/19	LZ	
o-Xylene	ND	1	0.29	5	ug/L		06/18/19	LZ	
Sec-butylbenzene	ND	1	0.32	5	ug/L		06/18/19	LZ	
Styrene	ND	1	0.22	5	ug/L		06/18/19	LZ	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L		06/18/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/L		06/18/19	LZ	
Tert-butylbenzene	ND	1	0.4	5	ug/L		06/18/19	LZ	
Tetrachloroethene	ND	1	0.8	5	ug/L		06/18/19	LZ	
Toluene	ND	1	0.24	5	ug/L		06/18/19	LZ	
trans-1,2-dichloroethene	ND	1	0.33	5	ug/L		06/18/19	LZ	
trans-1,3-dichloropropene	ND	1	0.23	5	ug/L		06/18/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		06/18/19	LZ	
Trichloroethene	ND	1	0.39	5	ug/L		06/18/19	LZ	
Trichlorofluoromethane	ND	1	0.25	5	ug/L		06/18/19	LZ	
Vinyl Chloride	ND	1	0.18	5	ug/L		06/18/19	LZ	
Xylenes (Total)	ND	1	0.45	5	ug/L		06/18/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*89*	*70-145*	
4-Bromofluorobenzene (SUR)	*108*	*70-145*	
Dibromofluoromethane (SUR)	*93*	*70-145*	
Toluene-d8 (SUR)	*103*	*70-145*	

QCBatchID:	**QC1203176**	**Analyst:**	sandyw	**Method:**	EPA 8015B
Matrix:	Water	**Analyzed:**	06/17/2019	**Instrument:**	VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203176MB1					
TPH (C6 to C10)	ND	ug/L	16	50	
TPH Gasoline	ND	ug/L	16	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203176LCS1											
TPH Gasoline	500		520		ug/L	104			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203176MS1, QC1203176MSD1												**Source: 416220-002**
TPH Gasoline	ND	500	500	520	520	ug/L	104	104	0.0	70-130	30	

QCBatchID:	**QC1203219**	**Analyst:**	sandyw	**Method:**	EPA 8015B
Matrix:	Solid	**Analyzed:**	06/20/2019	**Instrument:**	VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203219MB1					
TPH Gasoline	ND	mg/Kg	0.239	3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203219LCS1											
TPH Gasoline	5		5.8		mg/Kg	116			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203219MS1, QC1203219MSD1												**Source: 416329-041**
TPH Gasoline	ND	5	5	5.3	5.0	mg/Kg	106	100	5.8	70-130	20	

QCBatchID: QC1203220	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/17/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203220MB1					
4,4'-DDD	ND	ug/Kg	2.1	5	
4,4'-DDE	ND	ug/Kg	2	5	
4,4'-DDT	ND	ug/Kg	2	5	
a-BHC	ND	ug/Kg	1.6	5	
Aldrin	ND	ug/Kg	1.5	5	
b-BHC	ND	ug/Kg	1.5	5	
Chlordane (technical)	ND	ug/Kg	35	50	
d-BHC	ND	ug/Kg	1.2	5	
Dieldrin	ND	ug/Kg	2.1	5	
Endosulfan I	ND	ug/Kg	1.2	5	
Endosulfan II	ND	ug/Kg	2.8	5	
Endosulfan sulfate	ND	ug/Kg	3.4	5	
Endrin	ND	ug/Kg	2.7	5	
Endrin aldehyde	ND	ug/Kg	2.1	5	
Endrin Ketone	ND	ug/Kg	4.1	5	
Heptachlor	ND	ug/Kg	1.3	5	
Heptachlor epoxide	ND	ug/Kg	2.3	5	
Lindane (Gamma-BHC)	ND	ug/Kg	2	5	
Methoxychlor	ND	ug/Kg	9.2	10	
Toxaphene	ND	ug/Kg	54	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203220LCS1											
4,4'-DDD	50		54		ug/Kg	108			43-172		
4,4'-DDE	50		53		ug/Kg	106			44-163		
4,4'-DDT	50		54		ug/Kg	108			40-158		
a-BHC	50		52		ug/Kg	104			45-150		
Aldrin	50		52		ug/Kg	104			46-142		
b-BHC	50		54		ug/Kg	108			42-156		
d-BHC	50		57		ug/Kg	114			37-161		
Dieldrin	50		53		ug/Kg	106			47-151		
Endosulfan I	50		53		ug/Kg	106			47-141		
Endosulfan II	50		53		ug/Kg	106			44-156		
Endosulfan sulfate	50		55		ug/Kg	110			43-157		
Endrin	50		57		ug/Kg	114			47-160		
Endrin aldehyde	50		43		ug/Kg	86			32-127		
Endrin Ketone	50		56		ug/Kg	112			48-159		
Heptachlor	50		52		ug/Kg	104			50-144		
Heptachlor epoxide	50		50		ug/Kg	100			48-145		
Lindane (Gamma-BHC)	50		52		ug/Kg	104			47-151		
Methoxychlor	50		59		ug/Kg	118			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203220MS1, QC1203220MSD1												**Source: 416329-001**
4,4'-DDD	ND	50	50	49	54	ug/Kg	98	108	9.7	43-172	20	
4,4'-DDE	4.3	50	50	51	53	ug/Kg	93	97	3.8	44-163	20	
4,4'-DDT	8.6	50	50	60	61	ug/Kg	103	105	1.7	40-158	20	
a-BHC	ND	50	50	42	46	ug/Kg	84	92	9.1	45-150	20	

QCBatchID: QC1203220	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/17/2019	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203220MS1, QC1203220MSD1											**Source:**	**416329-001**
Aldrin	ND	50	50	44	48	ug/Kg	88	96	8.7	46-142	20	
b-BHC	ND	50	50	47	50	ug/Kg	94	100	6.2	42-156	20	
d-BHC	ND	50	50	47	52	ug/Kg	94	104	10.1	37-161	20	
Dieldrin	ND	50	50	45	49	ug/Kg	90	98	8.5	47-151	20	
Endosulfan I	ND	50	50	42	46	ug/Kg	84	92	9.1	47-141	20	
Endosulfan II	ND	50	50	44	48	ug/Kg	88	96	8.7	44-156	20	
Endosulfan sulfate	ND	50	50	44	49	ug/Kg	88	98	10.8	43-157	20	
Endrin	ND	50	50	50	55	ug/Kg	100	110	9.5	47-160	20	
Endrin aldehyde	ND	50	50	40	40	ug/Kg	80	80	0.0	32-127	20	
Endrin Ketone	ND	50	50	48	52	ug/Kg	96	104	8.0	48-159	20	
Heptachlor	ND	50	50	43	47	ug/Kg	86	94	8.9	50-144	20	
Heptachlor epoxide	ND	50	50	42	45	ug/Kg	84	90	6.9	48-145	20	
Lindane (Gamma-BHC)	6.4	50	50	51	56	ug/Kg	89	99	9.3	47-151	20	
Methoxychlor	ND	50	50	49	54	ug/Kg	98	108	9.7	36-182	20	

QCBatchID:	QC1203221	Analyst:	Jarriaga	Method:	EPA 8082
Matrix:	Solid	Analyzed:	06/17/2019	Instrument:	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203221MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203221LCS1											
PCB-1016	500		430		ug/Kg	86			70-130		
PCB-1260	500		460		ug/Kg	92			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203221MS1, QC1203221MSD1												**Source: 416329-001**
PCB-1016	ND	500	500	420	420	ug/Kg	84	84	0.0	70-130	20	
PCB-1260	ND	500	500	430	440	ug/Kg	86	88	2.3	70-130	20	

QCBatchID: QC1203262	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 06/17/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203262MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1203262	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 06/17/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203262MB1					
Methylene chloride	**3.2 J**	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203262LCS1, QC1203262LCSD1											
1,1-Dichloroethene	50	50	63	62	ug/Kg	126	124	2	59-172	22	
Benzene	50	50	58	62	ug/Kg	116	124	7	62-137	24	
Chlorobenzene	50	50	50	55	ug/Kg	100	110	10	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	60	61	ug/Kg	120	122	2	62-137	21	
Toluene	50	50	49	54	ug/Kg	98	108	10	59-139	21	
Trichloroethene	50	50	50	55	ug/Kg	100	110	10	66-142	21	

QCBatchID: QC1203265	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 06/17/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203265MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.122	0.5	
1,1,1-Trichloroethane	ND	ug/L	0.063	0.5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.063	0.5	
1,1,2-Trichloroethane	ND	ug/L	0.045	0.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.119	0.5	
1,1-Dichloroethane	ND	ug/L	0.078	0.5	
1,1-Dichloroethene	ND	ug/L	0.13	0.5	
1,1-Dichloropropene	ND	ug/L	0.06	0.5	
1,2,3-Trichlorobenzene	ND	ug/L	0.06	0.5	
1,2,3-Trichloropropane	ND	ug/L	0.073	0.5	
1,2,4-Trichlorobenzene	ND	ug/L	0.068	0.5	
1,2,4-Trimethylbenzene	ND	ug/L	0.078	0.5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.08	0.5	
1,2-Dibromoethane	ND	ug/L	0.043	0.5	
1,2-Dichlorobenzene	ND	ug/L	0.051	0.5	
1,2-Dichloroethane	ND	ug/L	0.066	0.5	
1,2-Dichloropropane	ND	ug/L	0.06	0.5	
1,3,5-Trimethylbenzene	ND	ug/L	0.097	0.5	
1,3-Dichlorobenzene	ND	ug/L	0.052	0.5	
1,3-Dichloropropane	ND	ug/L	0.068	0.5	
1,4-Dichlorobenzene	ND	ug/L	0.12	0.5	
2,2-Dichloropropane	ND	ug/L	0.11	0.5	
2-Butanone (MEK)	ND	ug/L	0.3	5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.23	1	
2-Chlorotoluene	ND	ug/L	0.079	0.5	
4-Chlorotoluene	ND	ug/L	0.08	0.5	
4-Isopropyltoluene	ND	ug/L	0.091	0.5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.16	5	
Acetone	ND	ug/L	0.2	10	
Allyl Chloride	ND	ug/L	0.08	0.5	
Benzene	ND	ug/L	0.071	0.5	
Bromobenzene	ND	ug/L	0.073	1	
Bromochloromethane	ND	ug/L	0.06	0.5	
Bromodichloromethane	ND	ug/L	0.06	0.5	
Bromoform	ND	ug/L	0.053	0.5	
Bromomethane	ND	ug/L	0.13	1	
Carbon Tetrachloride	ND	ug/L	0.045	0.5	
Chlorobenzene	ND	ug/L	0.075	0.5	
Chlorodibromomethane	ND	ug/L	0.045	0.5	
Chloroethane	ND	ug/L	0.4	0.5	
Chloroform	ND	ug/L	0.044	0.5	
Chloromethane	ND	ug/L	0.055	0.5	
cis-1,2-Dichloroethene	ND	ug/L	0.055	0.5	
cis-1,3-dichloropropene	ND	ug/L	0.061	0.5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.075	5	
Dibromomethane	ND	ug/L	0.06	0.5	
Dichlorodifluoromethane	ND	ug/L	0.062	0.5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	0.5	
Ethylbenzene	ND	ug/L	0.091	0.5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.25	0.5	
Hexachlorobutadiene	ND	ug/L	0.073	1	
Isopropylbenzene	ND	ug/L	0.089	0.5	

QCBatchID: QC1203265	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 06/17/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203265MB1					
m and p-Xylene	ND	ug/L	0.17	0.5	
Methylene chloride	**6.8**	ug/L	0.15	0.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.068	0.5	
Naphthalene	ND	ug/L	0.061	0.5	
N-butylbenzene	ND	ug/L	0.094	0.5	
N-propylbenzene	ND	ug/L	0.09	0.5	
o-Xylene	ND	ug/L	0.075	0.5	
Sec-butylbenzene	ND	ug/L	0.077	0.5	
Styrene	ND	ug/L	0.088	0.5	
t-Butyl alcohol (TBA)	ND	ug/L	5	5	
Tert-amylmethylether (TAME)	ND	ug/L	0.13	0.5	
Tert-butylbenzene	ND	ug/L	0.092	0.5	
Tetrachloroethene	ND	ug/L	0.15	0.5	
Toluene	ND	ug/L	0.078	0.5	
trans-1,2-dichloroethene	ND	ug/L	0.17	0.5	
trans-1,3-dichloropropene	ND	ug/L	0.056	0.5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.075	5	
Trichloroethene	ND	ug/L	0.078	0.5	
Trichlorofluoromethane	ND	ug/L	0.06	0.5	
Vinyl Chloride	ND	ug/L	0.08	0.5	
Xylenes (Total)	ND	ug/L	0.25	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203265LCS1, QC1203265LCSD1											
1,1-Dichloroethene	50	50	54	52	ug/L	108	104	4	59-172	22	
Benzene	50	50	55	53	ug/L	110	106	4	62-137	24	
Chlorobenzene	50	50	53	52	ug/L	106	104	2	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	55	53	ug/L	110	106	4	62-137	21	
Toluene	50	50	56	51	ug/L	112	102	9	59-139	21	
Trichloroethene	50	50	58	53	ug/L	116	106	9	66-142	21	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203265MS1, QC1203265MSD1												**Source: 416300-004**
1,1-Dichloroethene	ND	50	50	54	52	ug/L	108	104	3.8	59-172	22	
Benzene	ND	50	50	53	50	ug/L	106	100	5.8	62-137	24	
Chlorobenzene	ND	50	50	53	51	ug/L	106	102	3.8	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	55	53	ug/L	110	106	3.7	62-137	21	
Toluene	0.124	50	50	54	53	ug/L	108	106	1.9	59-139	21	
Trichloroethene	ND	50	50	53	52	ug/L	106	104	1.9	66-142	21	

QCBatchID: QC1203276	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/18/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203276MB1					
4,4'-DDD	ND	ug/Kg	2.1	5	
4,4'-DDE	ND	ug/Kg	2	5	
4,4'-DDT	ND	ug/Kg	2	5	
a-BHC	ND	ug/Kg	1.6	5	
Aldrin	ND	ug/Kg	1.5	5	
b-BHC	ND	ug/Kg	1.5	5	
Chlordane (technical)	ND	ug/Kg	35	50	
d-BHC	ND	ug/Kg	1.2	5	
Dieldrin	ND	ug/Kg	2.1	5	
Endosulfan I	ND	ug/Kg	1.2	5	
Endosulfan II	ND	ug/Kg	2.8	5	
Endosulfan sulfate	ND	ug/Kg	3.4	5	
Endrin	ND	ug/Kg	2.7	5	
Endrin aldehyde	ND	ug/Kg	2.1	5	
Endrin Ketone	ND	ug/Kg	4.1	5	
Heptachlor	ND	ug/Kg	1.3	5	
Heptachlor epoxide	ND	ug/Kg	2.3	5	
Lindane (Gamma-BHC)	ND	ug/Kg	2	5	
Methoxychlor	ND	ug/Kg	9.2	10	
Toxaphene	ND	ug/Kg	54	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203276LCS1											
4,4'-DDD	50		43		ug/Kg	86			43-172		
4,4'-DDE	50		44		ug/Kg	88			44-163		
4,4'-DDT	50		51		ug/Kg	102			40-158		
a-BHC	50		47		ug/Kg	94			45-150		
Aldrin	50		40		ug/Kg	80			46-142		
b-BHC	50		46		ug/Kg	92			42-156		
d-BHC	50		44		ug/Kg	88			37-161		
Dieldrin	50		45		ug/Kg	90			47-151		
Endosulfan I	50		43		ug/Kg	86			47-141		
Endosulfan II	50		42		ug/Kg	84			44-156		
Endosulfan sulfate	50		48		ug/Kg	96			43-157		
Endrin	50		47		ug/Kg	94			47-160		
Endrin aldehyde	50		38		ug/Kg	76			32-127		
Endrin Ketone	50		49		ug/Kg	98			48-159		
Heptachlor	50		49		ug/Kg	98			50-144		
Heptachlor epoxide	50		43		ug/Kg	86			48-145		
Lindane (Gamma-BHC)	50		46		ug/Kg	92			47-151		
Methoxychlor	50		56		ug/Kg	112			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203276MS1, QC1203276MSD1												**Source: 416329-029**
4,4'-DDD	ND	50	50	46	43	ug/Kg	92	86	6.7	43-172	20	
4,4'-DDE	ND	50	50	48	44	ug/Kg	96	88	8.7	44-163	20	
4,4'-DDT	ND	50	50	58	55	ug/Kg	116	110	5.3	40-158	20	
a-BHC	ND	50	50	48	46	ug/Kg	96	92	4.3	45-150	20	

QCBatchID: QC1203276	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/18/2019	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203276MS1, QC1203276MSD1											**Source:**	**416329-029**
Aldrin	ND	50	50	44	42	ug/Kg	88	84	4.7	46-142	20	
b-BHC	ND	50	50	50	49	ug/Kg	100	98	2.0	42-156	20	
d-BHC	ND	50	50	49	47	ug/Kg	98	94	4.2	37-161	20	
Dieldrin	ND	50	50	48	46	ug/Kg	96	92	4.3	47-151	20	
Endosulfan I	ND	50	50	46	44	ug/Kg	92	88	4.4	47-141	20	
Endosulfan II	ND	50	50	46	43	ug/Kg	92	86	6.7	44-156	20	
Endosulfan sulfate	ND	50	50	54	53	ug/Kg	108	106	1.9	43-157	20	
Endrin	ND	50	50	52	50	ug/Kg	104	100	3.9	47-160	20	
Endrin aldehyde	ND	50	50	43	41	ug/Kg	86	82	4.8	32-127	20	
Endrin Ketone	ND	50	50	54	49	ug/Kg	108	98	9.7	48-159	20	
Heptachlor	ND	50	50	52	49	ug/Kg	104	98	5.9	50-144	20	
Heptachlor epoxide	ND	50	50	44	43	ug/Kg	88	86	2.3	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	49	47	ug/Kg	98	94	4.2	47-151	20	
Methoxychlor	ND	50	50	65	59	ug/Kg	130	118	9.7	36-182	20	

QCBatchID:	**QC1203277**	**Analyst:**	Jarriaga	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203277MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203277LCS1											
PCB-1016	500		420		ug/Kg	84			70-130		
PCB-1260	500		440		ug/Kg	88			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203277MS1, QC1203277MSD1												**Source: 416329-029**
PCB-1016	ND	500	500	410	450	ug/Kg	82	90	9.3	70-130	20	
PCB-1260	ND	500	500	430	460	ug/Kg	86	92	6.7	70-130	20	

QCBatchID:	**QC1203293**	**Analyst:**	sandyw	**Method:**	EPA 8015B
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203293MB1					
TPH Gasoline	ND	mg/Kg	0.239	3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203293LCS1, QC1203293LCSD1											
TPH Gasoline	5	5	5.6	5.8	mg/Kg	112	116	4	70-130	20	

QCBatchID: QC1203294	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/18/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203294MB1					
4,4'-DDD	ND	ug/Kg	2.1	5	
4,4'-DDE	ND	ug/Kg	2	5	
4,4'-DDT	ND	ug/Kg	2	5	
a-BHC	ND	ug/Kg	1.6	5	
Aldrin	ND	ug/Kg	1.5	5	
b-BHC	ND	ug/Kg	1.5	5	
Chlordane (technical)	ND	ug/Kg	35	50	
d-BHC	ND	ug/Kg	1.2	5	
Dieldrin	ND	ug/Kg	2.1	5	
Endosulfan I	ND	ug/Kg	1.2	5	
Endosulfan II	ND	ug/Kg	2.8	5	
Endosulfan sulfate	ND	ug/Kg	3.4	5	
Endrin	ND	ug/Kg	2.7	5	
Endrin aldehyde	ND	ug/Kg	2.1	5	
Endrin Ketone	ND	ug/Kg	4.1	5	
Heptachlor	ND	ug/Kg	1.3	5	
Heptachlor epoxide	ND	ug/Kg	2.3	5	
Lindane (Gamma-BHC)	ND	ug/Kg	2	5	
Methoxychlor	ND	ug/Kg	9.2	10	
Toxaphene	ND	ug/Kg	54	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203294LCS1											
4,4'-DDD	50		45		ug/Kg	90			43-172		
4,4'-DDE	50		47		ug/Kg	94			44-163		
4,4'-DDT	50		43		ug/Kg	86			40-158		
a-BHC	50		45		ug/Kg	90			45-150		
Aldrin	50		35		ug/Kg	70			46-142		
b-BHC	50		45		ug/Kg	90			42-156		
d-BHC	50		45		ug/Kg	90			37-161		
Dieldrin	50		46		ug/Kg	92			47-151		
Endosulfan I	50		48		ug/Kg	96			47-141		
Endosulfan II	50		45		ug/Kg	90			44-156		
Endosulfan sulfate	50		48		ug/Kg	96			43-157		
Endrin	50		49		ug/Kg	98			47-160		
Endrin aldehyde	50		15		ug/Kg	30			32-127		L
Endrin Ketone	50		52		ug/Kg	104			48-159		
Heptachlor	50		43		ug/Kg	86			50-144		
Heptachlor epoxide	50		44		ug/Kg	88			48-145		
Lindane (Gamma-BHC)	50		43		ug/Kg	86			47-151		
Methoxychlor	50		51		ug/Kg	102			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203294MS1, QC1203294MSD1												**Source: 416329-053**
4,4'-DDD	ND	50	50	47	45	ug/Kg	94	90	4.3	43-172	20	
4,4'-DDE	ND	50	50	50	45	ug/Kg	100	90	10.5	44-163	20	
4,4'-DDT	ND	50	50	66	56	ug/Kg	132	112	16.4	40-158	20	
a-BHC	ND	50	50	44	41	ug/Kg	88	82	7.1	45-150	20	

QCBatchID: QC1203294	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/18/2019	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203294MS1, QC1203294MSD1											**Source:**	**416329-053**
Aldrin	ND	50	50	46	42	ug/Kg	92	84	9.1	46-142	20	
b-BHC	ND	50	50	49	49	ug/Kg	98	98	0.0	42-156	20	
d-BHC	ND	50	50	48	46	ug/Kg	96	92	4.3	37-161	20	
Dieldrin	ND	50	50	47	43	ug/Kg	94	86	8.9	47-151	20	
Endosulfan I	ND	50	50	45	40	ug/Kg	90	80	11.8	47-141	20	
Endosulfan II	ND	50	50	46	44	ug/Kg	92	88	4.4	44-156	20	
Endosulfan sulfate	ND	50	50	52	49	ug/Kg	104	98	5.9	43-157	20	
Endrin	ND	50	50	52	49	ug/Kg	104	98	5.9	47-160	20	
Endrin aldehyde	ND	50	50	44	40	ug/Kg	88	80	9.5	32-127	20	
Endrin Ketone	ND	50	50	52	50	ug/Kg	104	100	3.9	48-159	20	
Heptachlor	ND	50	50	47	44	ug/Kg	94	88	6.6	50-144	20	
Heptachlor epoxide	ND	50	50	45	40	ug/Kg	90	80	11.8	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	47	46	ug/Kg	94	92	2.2	47-151	20	
Methoxychlor	ND	50	50	60	56	ug/Kg	120	112	6.9	36-182	20	

QCBatchID:	**QC1203295**	**Analyst:**	Jarriaga	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203295MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203295LCS1											
PCB-1016	500		380		ug/Kg	76			70-130		
PCB-1260	500		360		ug/Kg	72			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203295MS1, QC1203295MSD1												**Source: 416329-053**
PCB-1016	ND	500	500	560	560	ug/Kg				70-130	20	
PCB-1260	ND	500	500	380	460	ug/Kg				70-130	20	

QCBatchID:	**QC1203300**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203300MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203300LCS1											
Arsenic	50		57.0		mg/Kg	114			80-120		
Lead	50		55.7		mg/Kg	111			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203300MS1, QC1203300MSD1												**Source: 416293-061**
Arsenic	11.6	50	50	53.7	53.7	mg/Kg	84	84	0.0	75-125	20	
Lead	7.09	50	50	56.8	56.6	mg/Kg	99	99	0.4	75-125	20	

QCBatchID:	**QC1203303**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203303MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203303LCS1											
Arsenic	50		55.2		mg/Kg	110			80-120		
Lead	50		56.1		mg/Kg	112			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203303MS1, QC1203303MSD1												**Source: 416329-013**
Arsenic	4.20	50	50	50.8	53.2	mg/Kg	93	98	4.6	75-125	20	
Lead	29.9	50	50	82.1	81.3	mg/Kg	104	103	1.0	75-125	20	

QCBatchID:	**QC1203304**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203304MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203304LCS1											
Arsenic	50		50.9		mg/Kg	102			80-120		
Lead	50		51.1		mg/Kg	102			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203304MS1, QC1203304MSD1												**Source: 416329-033**
Arsenic	10.7	50	50	51.1	51.0	mg/Kg	81	81	0.2	75-125	20	
Lead	9.72	50	50	59.7	55.0	mg/Kg	100	91	8.2	75-125	20	

QCBatchID:	**QC1203305**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	06/18/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203305MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203305LCS1											
Arsenic	50		50.0		mg/Kg	100			80-120		
Lead	50		49.8		mg/Kg	100			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203305MS1, QC1203305MSD1												**Source: 416329-053**
Arsenic	8.86	50	50	53.7	54.9	mg/Kg	90	92	2.2	75-125	20	
Lead	37.2	50	50	82.4	87.8	mg/Kg	90	101	6.3	75-125	20	

QCBatchID: QC1203337	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 06/19/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203337MB1					
Antimony	**0.95 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	1	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	3	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	3	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203337LCS1											
Antimony	100		99.9		mg/Kg	100			80-120		
Arsenic	100		95.5		mg/Kg	96			80-120		
Barium	100		95.2		mg/Kg	95			80-120		
Beryllium	100		108		mg/Kg	108			80-120		
Cadmium	100		96.2		mg/Kg	96			80-120		
Chromium	100		98.1		mg/Kg	98			80-120		
Cobalt	100		99.8		mg/Kg	100			80-120		
Copper	100		89.9		mg/Kg	90			80-120		
Lead	100		97.7		mg/Kg	98			80-120		
Molybdenum	100		104		mg/Kg	104			80-120		
Nickel	100		98.7		mg/Kg	99			80-120		
Selenium	100		93.7		mg/Kg	94			80-120		
Silver	100		109		mg/Kg	109			80-120		
Thallium	100		99.4		mg/Kg	99			80-120		
Vanadium	100		102		mg/Kg	102			80-120		
Zinc	100		99.9		mg/Kg	100			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203337MS1, QC1203337MSD1												**Source: 416329-029**
Antimony	1.87	100	100	39.5	40.1	mg/Kg	38	38	1.5	75-125	20	M
Arsenic	7.24	100	100	108	98.8	mg/Kg	101	92	8.9	75-125	20	
Barium	112	100	100	201	201	mg/Kg	89	89	0.0	75-125	20	
Beryllium	ND	100	100	110	113	mg/Kg	110	113	2.7	75-125	20	
Cadmium	2.36	100	100	95.9	92.3	mg/Kg	94	90	3.8	75-125	20	
Chromium	31.3	100	100	131	125	mg/Kg	100	94	4.7	75-125	20	
Cobalt	10.7	100	100	105	103	mg/Kg	94	92	1.9	75-125	20	
Copper	22.4	100	100	118	110	mg/Kg	96	88	7.0	75-125	20	
Lead	5.17	100	100	94.6	93.6	mg/Kg	89	88	1.1	75-125	20	
Molybdenum	2.93	100	100	95.3	95.0	mg/Kg	92	92	0.3	75-125	20	

QCBatchID: QC1203337	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 06/19/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203337MS1, QC1203337MSD1												**Source: 416329-029**
Nickel	25.6	100	100	121	114	mg/Kg	95	88	6.0	75-125	20	
Selenium	ND	100	100	76.8	76.4	mg/Kg	77	76	0.5	75-125	20	
Silver	ND	100	100	110	104	mg/Kg	110	104	5.6	75-125	20	
Thallium	0.85	100	100	83.6	90.9	mg/Kg	83	90	8.4	75-125	20	
Vanadium	57.7	100	100	170	162	mg/Kg	112	104	4.8	75-125	20	
Zinc	64.2	100	100	163	154	mg/Kg	99	90	5.7	75-125	20	

QCBatchID: QC1203340	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/19/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203340MB1					
4,4'-DDD	ND	ug/Kg	2.1	5	
4,4'-DDE	ND	ug/Kg	2	5	
4,4'-DDT	ND	ug/Kg	2	5	
a-BHC	ND	ug/Kg	1.6	5	
Aldrin	ND	ug/Kg	1.5	5	
b-BHC	ND	ug/Kg	1.5	5	
Chlordane (technical)	ND	ug/Kg	35	50	
d-BHC	ND	ug/Kg	1.2	5	
Dieldrin	ND	ug/Kg	2.1	5	
Endosulfan I	ND	ug/Kg	1.2	5	
Endosulfan II	ND	ug/Kg	2.8	5	
Endosulfan sulfate	ND	ug/Kg	3.4	5	
Endrin	ND	ug/Kg	2.7	5	
Endrin aldehyde	ND	ug/Kg	2.1	5	
Endrin Ketone	ND	ug/Kg	4.1	5	
Heptachlor	ND	ug/Kg	1.3	5	
Heptachlor epoxide	ND	ug/Kg	2.3	5	
Lindane (Gamma-BHC)	ND	ug/Kg	2	5	
Methoxychlor	ND	ug/Kg	9.2	10	
Toxaphene	ND	ug/Kg	54	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203340LCS1											
4,4'-DDD	50		46		ug/Kg	92			43-172		
4,4'-DDE	50		43		ug/Kg	86			44-163		
4,4'-DDT	50		42		ug/Kg	84			40-158		
a-BHC	50		45		ug/Kg	90			45-150		
Aldrin	50		36		ug/Kg	72			46-142		
b-BHC	50		45		ug/Kg	90			42-156		
d-BHC	50		46		ug/Kg	92			37-161		
Dieldrin	50		45		ug/Kg	90			47-151		
Endosulfan I	50		43		ug/Kg	86			47-141		
Endosulfan II	50		41		ug/Kg	82			44-156		
Endosulfan sulfate	50		42		ug/Kg	84			43-157		
Endrin	50		49		ug/Kg	98			47-160		
Endrin aldehyde	50		28		ug/Kg	56			32-127		
Endrin Ketone	50		42		ug/Kg	84			48-159		
Heptachlor	50		47		ug/Kg	94			50-144		
Heptachlor epoxide	50		41		ug/Kg	82			48-145		
Lindane (Gamma-BHC)	50		46		ug/Kg	92			47-151		
Methoxychlor	50		55		ug/Kg	110			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203340MS1, QC1203340MSD1												**Source: 416299-014**
4,4'-DDD	ND	50	50	42	46	ug/Kg	84	92	9.1	43-172	20	
4,4'-DDE	61	50	50	77	78	ug/Kg	32	34	1.3	44-163	20	M
4,4'-DDT	27	50	50	67	71	ug/Kg	80	88	5.8	40-158	20	
a-BHC	ND	50	50	41	47	ug/Kg	82	94	13.6	45-150	20	

QCBatchID: QC1203340	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/19/2019	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203340MS1, QC1203340MSD1											**Source:**	**416299-014**
Aldrin	ND	50	50	37	40	ug/Kg	74	80	7.8	46-142	20	
b-BHC	ND	50	50	43	47	ug/Kg	86	94	8.9	42-156	20	
d-BHC	ND	50	50	44	48	ug/Kg	88	96	8.7	37-161	20	
Dieldrin	ND	50	50	43	45	ug/Kg	86	90	4.5	47-151	20	
Endosulfan I	ND	50	50	41	43	ug/Kg	82	86	4.8	47-141	20	
Endosulfan II	ND	50	50	40	42	ug/Kg	80	84	4.9	44-156	20	
Endosulfan sulfate	ND	50	50	43	47	ug/Kg	86	94	8.9	43-157	20	
Endrin	ND	50	50	48	51	ug/Kg	96	102	6.1	47-160	20	
Endrin aldehyde	ND	50	50	37	38	ug/Kg	74	76	2.7	32-127	20	
Endrin Ketone	ND	50	50	41	44	ug/Kg	82	88	7.1	48-159	20	
Heptachlor	ND	50	50	45	49	ug/Kg	90	98	8.5	50-144	20	
Heptachlor epoxide	ND	50	50	41	42	ug/Kg	82	84	2.4	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	43	47	ug/Kg	86	94	8.9	47-151	20	
Methoxychlor	ND	50	50	63	49	ug/Kg	126	98	25.0	36-182	20	M

QCBatchID: QC1203350	Analyst: dswafford	Method: EPA 6010B
Matrix: Water	Analyzed: 06/19/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203350MB1					
Antimony	ND	mg/L	0.014	0.04	
Arsenic	ND	mg/L	0.008	0.01	
Barium	ND	mg/L	0.002	0.01	
Beryllium	ND	mg/L	0.001	0.005	
Cadmium	ND	mg/L	0.001	0.005	
Chromium	ND	mg/L	0.002	0.01	
Cobalt	ND	mg/L	0.001	0.005	
Copper	ND	mg/L	0.004	0.01	
Lead	ND	mg/L	0.005	0.01	
Molybdenum	ND	mg/L	0.005	0.01	
Nickel	ND	mg/L	0.003	0.02	
Selenium	ND	mg/L	0.016	0.03	
Silver	ND	mg/L	0.003	0.005	
Thallium	**0.014 J**	mg/L	0.009	0.05	
Vanadium	ND	mg/L	0.002	0.005	
Zinc	ND	mg/L	0.007	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203350LCS1											
Antimony	2		1.97		mg/L	99			80-120		
Arsenic	2		1.86		mg/L	93			80-120		
Barium	2		1.83		mg/L	92			80-120		
Beryllium	2		1.94		mg/L	97			80-120		
Cadmium	2		1.82		mg/L	91			80-120		
Chromium	2		1.89		mg/L	95			80-120		
Cobalt	2		1.91		mg/L	96			80-120		
Copper	2		1.81		mg/L	91			80-120		
Lead	2		1.86		mg/L	93			80-120		
Molybdenum	2		2.06		mg/L	103			80-120		
Nickel	2		1.88		mg/L	94			80-120		
Selenium	2		1.81		mg/L	91			80-120		
Silver	2		1.92		mg/L	96			80-120		
Thallium	2		1.95		mg/L	98			80-120		
Vanadium	2		1.97		mg/L	99			80-120		
Zinc	2		1.89		mg/L	95			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203350MS1, QC1203350MSD1												**Source: 416329-071**
Antimony	ND	1	1	1.01	0.985	mg/L	101	99	2.5	75-125	20	
Arsenic	ND	1	1	0.956	0.933	mg/L	96	93	2.4	75-125	20	
Barium	ND	1	1	0.974	0.974	mg/L	97	97	0.0	75-125	20	
Beryllium	ND	1	1	1.04	1.04	mg/L	104	104	0.0	75-125	20	
Cadmium	ND	1	1	0.936	0.934	mg/L	94	93	0.2	75-125	20	
Chromium	ND	1	1	1.02	1.02	mg/L	102	102	0.0	75-125	20	
Cobalt	ND	1	1	1.01	1.00	mg/L	101	100	1.0	75-125	20	
Copper	ND	1	1	0.966	0.973	mg/L	97	97	0.7	75-125	20	
Lead	ND	1	1	0.967	0.942	mg/L	97	94	2.6	75-125	20	
Molybdenum	ND	1	1	1.05	1.03	mg/L	105	103	1.9	75-125	20	

QCBatchID: QC1203350	Analyst: dswafford	Method: EPA 6010B
Matrix: Water	Analyzed: 06/19/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203350MS1, QC1203350MSD1												**Source: 416329-071**
Nickel	ND	1	1	0.991	0.994	mg/L	99	99	0.3	75-125	20	
Selenium	ND	1	1	0.881	0.898	mg/L	88	90	1.9	75-125	20	
Silver	ND	1	1	0.949	1.02	mg/L	95	102	7.2	75-125	20	
Thallium	ND	1	1	1.01	0.986	mg/L	101	99	2.4	75-125	20	
Vanadium	ND	1	1	1.11	1.08	mg/L	111	108	2.7	75-125	20	
Zinc	ND	1	1	0.975	0.972	mg/L	98	97	0.3	75-125	20	

QCBatchID:	**QC1203360**	**Analyst:**	sbailey-woo	**Method:**	EPA 6020
Matrix:	Water	**Analyzed:**	06/19/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203360MB1					
Arsenic	ND	ug/L	0.31	2	
Lead	ND	ug/L	0.76	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203360LCS1											
Arsenic	50		46.7		ug/L	93			80-120		
Lead	50		52.2		ug/L	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203360MS1, QC1203360MSD1												**Source: 416293-069**
Arsenic	ND	50	50	45.2	46.3	ug/L	90	93	2.4	75-125	20	
Lead	ND	50	50	52.4	52.5	ug/L	105	105	0.2	75-125	20	

QCBatchID:	**QC1203402**	**Analyst:**	cmorales	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	06/20/2019	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203402MB1					
Mercury	ND	mg/Kg	0.039	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203402LCS1											
Mercury	0.83		0.90		mg/Kg	108			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203402MS1, QC1203402MSD1												**Source: 416329-029**
Mercury	ND	0.83	0.83	0.86	0.90	mg/Kg	104	108	4.5	75-125	20	

QCBatchID:	**QC1203420**	**Analyst:**	cmorales	**Method:**	EPA 7470A
Matrix:	Water	**Analyzed:**	06/20/2019	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203420MB1					
Mercury	ND	ug/L	0.094	0.4	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203420LCS1											
Mercury	5		5.12		ug/L	102			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203420MS1, QC1203420MSD1												**Source: 416329-071**
Mercury	ND	5	5	4.82	5.04	ug/L	96	101	4.5	75-125	20	

QCBatchID: QC1203440	Analyst: Abanh	Method: EPA 8081A
Matrix: Water	Analyzed: 06/21/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203440MB1					
4,4'-DDD	ND	ug/L	0.011	0.1	
4,4'-DDE	ND	ug/L	0.006	0.1	
4,4'-DDT	ND	ug/L	0.011	0.1	
a-BHC	ND	ug/L	0.002	0.1	
Aldrin	ND	ug/L	0.007	0.1	
b-BHC	ND	ug/L	0.003	0.1	
Chlordane (technical)	ND	ug/L	0.27	1	
d-BHC	ND	ug/L	0.006	0.1	
Dieldrin	ND	ug/L	0.006	0.1	
Endosulfan I	ND	ug/L	0.004	0.1	
Endosulfan II	ND	ug/L	0.011	0.1	
Endosulfan sulfate	ND	ug/L	0.012	0.1	
Endrin	ND	ug/L	0.008	0.1	
Endrin aldehyde	ND	ug/L	0.009	0.1	
Endrin Ketone	ND	ug/L	0.011	0.1	
Heptachlor	ND	ug/L	0.003	0.1	
Heptachlor epoxide	ND	ug/L	0.002	0.1	
Lindane (Gamma-BHC)	ND	ug/L	0.002	0.1	
Methoxychlor	ND	ug/L	0.055	0.1	
Mirex	ND	ug/L	0.057	0.5	
Toxaphene	ND	ug/L	0.48	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203440LCS1, QC1203440LCSD1											
4,4'-DDD	0.5	0.5	0.36	0.43	ug/L	72	86	18	42-142	20	
4,4'-DDE	0.5	0.5	0.33	0.38	ug/L	66	76	14	48-133	20	
4,4'-DDT	0.5	0.5	0.33	0.37	ug/L	66	74	11	40-143	20	
a-BHC	0.5	0.5	0.34	0.39	ug/L	68	78	14	55-122	20	
b-BHC	0.5	0.5	0.34	0.40	ug/L	68	80	16	46-136	20	
d-BHC	0.5	0.5	0.36	0.41	ug/L	72	82	13	53-124	20	
Dieldrin	0.5	0.5	0.34	0.40	ug/L	68	80	16	49-129	20	
Endosulfan I	0.5	0.5	0.33	0.38	ug/L	66	76	14	54-122	20	
Endosulfan II	0.5	0.5	0.32	0.39	ug/L	64	78	20	46-132	20	
Endosulfan sulfate	0.5	0.5	0.36	0.42	ug/L	72	84	15	52-129	20	
Endrin	0.5	0.5	0.38	0.43	ug/L	76	86	12	57-145	20	
Endrin aldehyde	0.5	0.5	0.31	0.37	ug/L	62	74	18	48-116	20	
Endrin Ketone	0.5	0.5	0.33	0.41	ug/L	66	82	22	44-137	20	L
Heptachlor	0.5	0.5	0.37	0.41	ug/L	74	82	10	51-128	20	
Heptachlor epoxide	0.5	0.5	0.32	0.36	ug/L	64	72	12	51-122	20	
Lindane (Gamma-BHC)	0.5	0.5	0.35	0.39	ug/L	70	78	11	54-128	20	
Methoxychlor	0.5	0.5	0.39	0.44	ug/L	78	88	12	52-158	20	

QCBatchID: QC1203441	Analyst: Abanh	Method: EPA 8082
Matrix: Water	Analyzed: 06/21/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203441MB1					
PCB-1016	ND	ug/L	0.058	0.5	
PCB-1221	ND	ug/L	0.253	0.5	
PCB-1232	ND	ug/L	0.196	0.5	
PCB-1242	ND	ug/L	0.169	0.5	
PCB-1248	ND	ug/L	0.1	0.5	
PCB-1254	ND	ug/L	0.054	0.5	
PCB-1260	ND	ug/L	0.08	0.5	
PCB-1262	ND	ug/L	0.045	0.5	
PCB-1268	ND	ug/L	0.062	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203441LCS1, QC1203441LCSD1											
PCB-1016	5	5	3.8	3.8	ug/L	76	76	0	70-130	20	
PCB-1260	5	5	3.7	4.1	ug/L	74	82	10	70-130	20	

QCBatchID: QC1203448	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/21/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203448MB1					
4,4'-DDD	ND	ug/Kg	2.1	5	
4,4'-DDE	ND	ug/Kg	2	5	
4,4'-DDT	ND	ug/Kg	2	5	
a-BHC	ND	ug/Kg	1.6	5	
Aldrin	ND	ug/Kg	1.5	5	
b-BHC	ND	ug/Kg	1.5	5	
Chlordane (technical)	ND	ug/Kg	35	50	
d-BHC	ND	ug/Kg	1.2	5	
Dieldrin	ND	ug/Kg	2.1	5	
Endosulfan I	ND	ug/Kg	1.2	5	
Endosulfan II	ND	ug/Kg	2.8	5	
Endosulfan sulfate	ND	ug/Kg	3.4	5	
Endrin	ND	ug/Kg	2.7	5	
Endrin aldehyde	ND	ug/Kg	2.1	5	
Endrin Ketone	ND	ug/Kg	4.1	5	
Heptachlor	ND	ug/Kg	1.3	5	
Heptachlor epoxide	ND	ug/Kg	2.3	5	
Lindane (Gamma-BHC)	ND	ug/Kg	2	5	
Methoxychlor	ND	ug/Kg	9.2	10	
Toxaphene	ND	ug/Kg	54	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203448LCS1											
4,4'-DDD	50		44		ug/Kg	88			43-172		
4,4'-DDE	50		45		ug/Kg	90			44-163		
4,4'-DDT	50		47		ug/Kg	94			40-158		
a-BHC	50		48		ug/Kg	96			45-150		
Aldrin	50		39		ug/Kg	78			46-142		
b-BHC	50		48		ug/Kg	96			42-156		
d-BHC	50		45		ug/Kg	90			37-161		
Dieldrin	50		45		ug/Kg	90			47-151		
Endosulfan I	50		44		ug/Kg	88			47-141		
Endosulfan II	50		44		ug/Kg	88			44-156		
Endosulfan sulfate	50		48		ug/Kg	96			43-157		
Endrin	50		50		ug/Kg	100			47-160		
Endrin aldehyde	50		33		ug/Kg	66			32-127		
Endrin Ketone	50		48		ug/Kg	96			48-159		
Heptachlor	50		49		ug/Kg	98			50-144		
Heptachlor epoxide	50		42		ug/Kg	84			48-145		
Lindane (Gamma-BHC)	50		47		ug/Kg	94			47-151		
Methoxychlor	50		53		ug/Kg	106			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203448MS1, QC1203448MSD1												**Source: 416507-003**
4,4'-DDD	ND	50	50	48	45	ug/Kg	96	90	6.5	43-172	20	
4,4'-DDE	ND	50	50	53	41	ug/Kg	106	82	25.5	44-163	20	M
4,4'-DDT	ND	50	50	52	55	ug/Kg	104	110	5.6	40-158	20	
a-BHC	ND	50	50	49	46	ug/Kg	98	92	6.3	45-150	20	

QCBatchID: QC1203448	Analyst: Jarriaga	Method: EPA 8081A
Matrix: Solid	Analyzed: 06/21/2019	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203448MS1, QC1203448MSD1											**Source:**	**416507-003**
Aldrin	ND	50	50	48	44	ug/Kg	96	88	8.7	46-142	20	
b-BHC	ND	50	50	53	45	ug/Kg	106	90	16.3	42-156	20	
d-BHC	ND	50	50	34	34	ug/Kg	68	68	0.0	37-161	20	
Dieldrin	ND	50	50	46	42	ug/Kg	92	84	9.1	47-151	20	
Endosulfan I	ND	50	50	42	36	ug/Kg	84	72	15.4	47-141	20	
Endosulfan II	ND	50	50	44	42	ug/Kg	88	84	4.7	44-156	20	
Endosulfan sulfate	ND	50	50	36	36	ug/Kg	72	72	0.0	43-157	20	
Endrin	ND	50	50	55	41	ug/Kg	110	82	29.2	47-160	20	M
Endrin aldehyde	ND	50	50	22	16	ug/Kg	44	32	31.6	32-127	20	M
Endrin Ketone	ND	50	50	22	24	ug/Kg	44	48	8.7	48-159	20	M
Heptachlor	ND	50	50	52	44	ug/Kg		88	16.7	50-144	20	
Heptachlor epoxide	ND	50	50	42	35	ug/Kg	84	70	18.2	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	50	47	ug/Kg	100	94	6.2	47-151	20	
Methoxychlor	ND	50	50	87	70	ug/Kg	174	140	21.7	36-182	20	M

QCBatchID:	QC1203449	Analyst:	Jarriaga	Method:	EPA 8082
Matrix:	Solid	Analyzed:	06/21/2019	Instrument:	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203449MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203449LCS1											
PCB-1016	500		420		ug/Kg	84			70-130		
PCB-1260	500		380		ug/Kg	76			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1203449MS1, QC1203449MSD1												**Source: 416507-003**
PCB-1016	ND	500	500	540	630	ug/Kg	108	126	15.4	70-130	20	
PCB-1260	ND	500	500	440	660	ug/Kg	88	132	40.0	70-130	20	M

QCBatchID: QC1203546	Analyst: TWu	Method: EPA 8015M
Matrix: Solid	Analyzed: 06/25/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203546MB1					
TPH (C10 to C28) (SGT)	ND	mg/Kg	10	10	
TPH (C13 to C28) (SGT)	ND	mg/Kg	10	10	
TPH (C29 to C 40) (SGT)	ND	mg/Kg	20	20	
TPH (C6 to C12) (SGT)	ND	mg/Kg	10	10	
TPH Diesel (SGT)	ND	mg/Kg	10	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203546LCS1											
TPH (C10 to C28)	250		232.31			93			-		
TPH Diesel (SGT)	250		220		mg/Kg	88			36-138		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203546MS1, QC1203546MSD1												**Source: 416458-004**
TPH (C10 to C28) (SGT)	ND	250	250	216	218	mg/Kg	86	87	0.9	70-130	30	

QCBatchID: QC1203613	Analyst: Abanh	Method: EPA 8015M
Matrix: Solid	Analyzed: 06/26/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203613MB1					
TPH (C10 to C28)	ND	mg/Kg	10	10	
TPH Diesel	ND	mg/Kg	10	10	
TPH Gasoline	ND	mg/Kg	10	10	
TPH Motor Oil	ND	mg/Kg	20	20	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203613LCS1											
TPH (C10 to C28)	250		220		mg/Kg	88			60-133		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1203613MS1, QC1203613MSD1												**Source: 416329-030**
TPH (C10 to C28)	ND	250	250	180	190	mg/Kg	72	76	5.4	70-130	20	

QCBatchID:	**QC1203649**	**Analyst:**	Abanh	**Method:**	EPA 8015B
Matrix:	Water	**Analyzed:**	06/27/2019	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1203649MB1					
TPH (C10 to C22)	ND	mg/L	0.04	0.1	
TPH (C22 to C36)	ND	mg/L	0.07	0.3	
TPH Diesel	**0.05 J**	mg/L	0.04	0.1	
TPH Motor Oil	ND	mg/L	0.07	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1203649LCS1, QC1203649LCSD1											
TPH Diesel	1	1	0.74	0.82	mg/L	74	82	10	70-130	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave., Orange, CA 92868 Phone: (714) 771-6900 Fax: (714) 538-1209	Lab No: 416329 Page: 1 of 8	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)	PCBs (EPA Method 8082)			Test Instructions / Comments
B83-0.5	6/14/19	0739	S	2 x Jars	Ice					X	X	X	X			
B83-0.5-DUP		0739		1 x Jar						X	X	X				
B83-1.5		0743		1 x Jar						X	X	X				
B83-2.5		0745		1 x Jar						X	X	X				
B79-0.5		0754		1 x Jar						X	X	X	X			
B79-0.5-DUP		0754		1 x Jar						X	X	X				
B79-1.5		0756		1 x Jar						X	X	X				
B79-2.5		0801		1 x Jar						X	X	X				
B81-0.5		0810		1 x Jar						X	X	X	X			
B81-0.5-DUP	6/14/19	0810	S	1 x Jar	Ice					X	X	X				

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	Terraphase / Geologist	6/14/19 1345
1 Received By:	[illegible]	Hao Tran	Enthalpy	6/14/19 1345
2 Relinquished By:	[illegible]	Hao Tran	"	6/14/19 1600
2 Received By:	[illegible]	Leatea Thermon	EA	06/14/19 1600
3 Relinquished By:				
3 Received By:				

23.6 125 / <.7 11.6

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Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

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B81 - 1.5	6/14/19	0811	S	1 Jar	Ice					X	X	X				
B81 - 2.5		0813		1 Jar						X	X	X				
B80 - 0.5		0818		1 Jar						X	X	X				
B80 - 1.5		0821		1 Jar						X	X	X				
B80 - 2.5		0825		1 Jar						X	X	X				
B82 - 0.5		0832		1 Jar						X	X	X				
B82 - 1.5		0834		1 Jar						X	X	X				
B82 - 2.5		0836		1 Jar	Ice					X	X	X				
B85 - 0.5		0901		5 VOA 1 Jar	2, Ice	X	X			X	X	X	X			
B85 - 0.5 - DUP	6/14/19	0904	S	5 VOA 1 Jar	2, Ice	X	X			X	X	X				

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1 Relinquished By:	Tanner Rickard	Tanner Rickard	Terraphase / Geologist	6/14/19 1345
1 Received By:	[illegible]	HAO TRAN	Enthalpy	6/14/19 1345
2 Relinquished By:	[illegible]	HAO TRAN	"	6/14/19 16:00
2 Received By:	[illegible]	Hatherman	EA	06/14/19 1600
3 Relinquished By:				
3 Received By:				

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Chain of Custody Record

Lab No: 416329

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Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

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B85-1.5	6/14/19	0906	S	5VOA 1 Jar	Ice	X	X			X	X	X				
B85-2.5		0909		5VOA 1 Jar	Ice	X	X			X	X	X				
B86-0.5		0917		5VOA 1 Jar	Ice	X	X			X	X	X				
B86-1.5		0920		5VOA 1 Jar	Ice	X	X			X	X	X				
B86-2.5		0924		5VOA 1 Jar	Ice	X	X			X	X	X				
B84-0.5		0936		1 Jar						X	X	X				
B84-1.5		0940		1 Jar						X	X	X				
B84-2.5		0942		1 Jar						X	X	X				
B101-0.5		1004		2 Jar 3VOA		X		X		X		X	X			
B101-0.5-DUP	6/14/19	~~1004~~ 1005	S	2 Jar 3VOA	Ice	X		X		X		X				

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1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/14/19 1345
1 Received By:	[signature]	Hao Tran	Enthalpy	6/14/19 1345
2 Relinquished By:	[signature]	Hao Tran	"	6/14/19 16:00
2 Received By:	[signature]	Leatherman	EA	06/14/19 1600
3 Relinquished By:				
3 Received By:				

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B101 - 1.5	6/14/19	1010	S	2 Jar 3 VOA	Ice	X		X		X		X				
B101 - 2.5		1012		2 Jar 3 VOA		X		X		X		X				
B102 - 0.5		1015		3 VOA 2 Jar		X		X		X		X				
B102 - 0.5 - DUP		1015		1 Jar				X								
B102 - 1.5		1019		3 VOA 2 Jar		X		X		X		X				
B102 - 2.5		1021		3 VOA 2 Jar		X		X		X		X				
B100 - 0.5		1040				X		X		X		X				
B100 - 1.5		1043				X		X		X		X				
B100 - 2.5		1045		3 VOA 2 Jar		X		X		X		X				
B99 - 0.5	6/14/19	1055	S	3 VOA 2 Jars	Ice	X		X		X		X				

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	Tanner Rickard	Tanner Rickard	Terraphase / Geologist	6/14/19 1345
1 Received By:	[illegible]	HAO TRAN	Enthalpy	6/14/19 1345
2 Relinquished By:	[illegible]	HAO TRAN	"	6/14/19 1600
2 Received By:	[illegible]	Leatherman	EH	06/14/19 1600
3 Relinquished By:				
3 Received By:				

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B99-0.5-DUP	6/14/19	1055	S	2 Jars	Ice	X		X		X		X	X			
B99-1.5		1057		2 Jars		X		X		X		X	X			
B99-2.5		1100		2 Jars 3 VOA		X		X		X		X				
B98-0.5		1120		2 Jars		X		X		X		X	X			
B98-1.5		1122		2 Jars		X		X		X		X	X			
B98-2.5		1127		2 Jars 3 VOA		X		X		X		X				
B109-0.5		1139		1 Jar						X	X	X				
B109-1.5		1140		1 Jar						X	X	X				
B109-2.5		1142		1 Jar						X	X	X				
B108-0.5	6/14/19	1149	S		Ice					X	X	X				

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[illegible]	Tanner Rickard	Terraphase / Geologist	6/14/19 1345
1 Received By:	[illegible]	HAO TRAN	~~Enthalpy~~	6/14/19 1345
2 Relinquished By:	[illegible]	HAO TRAN	"	6/14/19 16:00
2 Received By:	[illegible]	Leatherman	EH	06/14/19 1600
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B108 - 1.5	6/14/19	1151	S	1 Jar	Ice					X	X	X				
B108 -2.5		1153		1 Jar						X	X	X				
B107-0.5		1159		1 Jar						X	X	X	X			
B107-0.5-DUP		1159		1 Jar									X			
B107-1.5		1201		1 Jar						X	X	X				
B107-2.5		1206		1 Jar						X	X	X				
B106 -0.5		1210		1 Jar						X	X	X				
B106 -1.5		1212		1 Jar						X	X	X				
B106 -2.5		1214		1 Jar						X	X	X				
B105-0.5	6/14/19	1220	S	1 Jar	Ice					X	X	X	X			

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3 Received By:				

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B105-1.5	6/14/19	1220	S	1 Jar	Ice					X	X	X				
B105-2.5		1223		1 Jar						X	X	X				
B105-0.5-DUP		1224		1 Jar						X	X	X				
B104-0.5		1228		1 Jar						X	X	X				
B104-1.5		1230		1 Jar						X	X	X				
B104-2.5		1232		1 Jar						X	X	X				
B103-0.5		1235								X	X	X	X			
B103-0.5-DUP		1235								X		X				
B103-1.5		1237								X	X	X				
B103-2.5	6/14/19	1239	S	1 Jar	Ice					X	X	X				

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931 W. Barkley Ave., Orange, CA 92868	Lab No: 416329	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714) 538-1209	Page: 8 of 8	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
1 Park Plaza, Suite 1000, Irvine, CA 92614							

ENTHALPY analytical, inc.

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase Engineering Inc	Name:	Hamilton High School
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman Ave., Ste. 410	Address:	2955 S. Robertson Boulevard
	Irvine, California 92612		Los Angeles, CA
Phone:	(949) 377-2227 ext. 89	Global ID:	
Cell:	(213) 422-5850	Sampled By:	T. Rickard and W. Skillings

Analysis Request

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	TPH g/d/o (EPA 8015M); TPHg 5035 prep	VOCs (EPA Method 8260)	Title 22 Metals (EPA Method 6010)	Cobalt (EPA Method 6010)	Arsenic (EPA Method 6020)	Lead (EPA Method 6020)	OCPs (EPA Method 8081A)	PCBs (EPA Method 8082)			Test Instructions / Comments
EB-03	6/14/19	1315	W	3xamber 2poly, 6VOA	2,3 None	X	X	X		X	X	X	X			

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	Terraphase / Geologist	6/14/19 1345
1 Received By:	[signature]	HAO TRAN	Enthalpy	6/14/19 1345
2 Relinquished By:	[signature]	HAO TRAN	"	6/14/19 16:00
2 Received By:	[signature]	Leatherman	EA	06/14/19 1600
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Engineering Project: Hamilton HS

Date Received: 6/14/19 Sampler's Name Present: [X] Yes [ ] No

Section 2

Sample(s) received in a cooler? [✓] Yes, How many? ~~1~~ 2 (ff 6/14) [ ] No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 23.6 #2: 10.6 #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: [✓] Ice [ ] Ice Packs [ ] Bubble Wrap [ ] Styrofoam [ ] Paper [ ] None [ ] Other _____

Cooler Temp (°C): #1: 12.5 #2: 5.2 #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.		✓	
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Missing: -034, -039 (1 jar), -043 (3 VOA vials), -046 (3 VOA vials).
Sample -008: 3 vials received, but no 5035 tests requested.
1 ~~3 jars~~ jar and 3 vials received w/ no label from client.

Section 6

For discrepancies, how was the Project Manager notified? [ ] Verbal PM Initials: _____ Date/Time _____
[X] Email (email sent to/on): DG / 6/14/19

Project Manager's response:
Client confirmed unlabeled jar was for sample -046. (ff 6/17)

Completed By: [signature] Date: 06/14/19

Enthalpy Analytical Field Technician Request Form

Version # 2.7
Effective 9/10/15

Client Info

Client Name:	Terraphase Engineering
Address:	18401 Von Karman Avenue, Suite 410
City:	Irvine, CA 92612
Ordered By:	Wes Skillings
Client Project Manager:	
Phone:	(o) 949-377-2227 x 128 (c) 520-668-2968
Email:	wes.skillings@terraphase.com

Site Info

Address:	Hamilton High School 2955 South Robertson Blvd
City:	Los Angeles, CA 90034
Site Contact:	Wes Skillings
Phone:	520-668-2968
2nd Site Contact:	Tanner Rickard
Phone:	310-971-7107

Request Completed By

Enthalpy Contact:	Diane Galvan
Date / Time:	6/11/19 @ 11:35

Date(s) Needed:		6/14/19 @ 3:45pm			
Before:		After:		Between:	
Assigned Field Technician:					
Arrival Time:			Leave Time:		
Pick Up	✔		**Delivery**		

Micro Sampling

1st Day:		Sampling Time:		# of samples:	
2nd Day:		Sampling Time:		# of samples:	
Verbal Notification required (ASAP):					
Primary Notification Contact Info:					
Secondary Notification Contact Info:					
Analysis:					

Water/Soil Sampling

ISCO:		Soil:		Water:	
Meter readings (ISCO):			# of samples:		
Analysis:					

Sampling Notes

TAT:		Return ASAP:		Return by:	

Comments/Instructions:

Enthalpy Coordinator Use Only		Enthalpy PM Use Only	
Request Approved:		☐ Emailed ☑ Phoned ☐ No Notification	
Alternate Date/Time proposed:		Client contact notified:	Wes Skillings
Request Denied:			
Name / Signature:		Name / Signature:	Diane Galvan
Date/Time:		Date/Time:	6/11/19 @ 11:30

Please initial and date any changes.

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	Terraphase Engineering
Address:	18401 Von Karman Ave, Suite #410 Irvine, CA 92612
Attn:	Clare Steedman
Comments:	Hamilton HS S030.008.003

Lab Request:	418214
Report Date:	08/20/2019
Date Received:	08/12/2019
Client ID:	15743

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
418214-001	B20BB-0.5
418214-002	B11BB-2.5
418214-004	B11DD-1.5
418214-005	B91BB-1.5
418214-006	B70BB-1.5
418214-007	B83CC-0.5
418214-008	B83DD-0.5
418214-009	B83AA-0.5
418214-010	B83BB-0.5
418214-011	B12DD-0.5
418214-012	B12AA-0.5
418214-013	B12BB-0.5
418214-014	B12CC-0.5
418214-015	EB-01

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Diane M. Galvan

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 12:35	**Site:**			
Sample #:	**418214-001**	**Client Sample #:**	B20BB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Arsenic	**97.5**	1	0.108	0.3	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 12:50	**Site:**			
Sample #:	**418214-002**	**Client Sample #:**	B11BB-2.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Arsenic	**16.5**	1	0.108	0.3	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:05	**Site:**			
Sample #:	**418214-004**	**Client Sample #:**	B11DD-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Arsenic	**42.6**	1	0.108	0.3	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:20	**Site:**			
Sample #:	**418214-005**	**Client Sample #:**	B91BB-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Lead	**5.98**	1	0.128	0.5	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:30	**Site:**			
Sample #:	**418214-006**	**Client Sample #:**	B70BB-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Arsenic	**22.3**	1	0.108	0.3	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:40	**Site:**			
Sample #:	**418214-007**	**Client Sample #:**	B83CC-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Lead	**28.0**	1	0.128	0.5	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:45	**Site:**			
Sample #:	**418214-008**	**Client Sample #:**	B83DD-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Lead	**39.2**	1	0.128	0.5	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:47	**Site:**			
Sample #:	**418214-009**	**Client Sample #:**	B83AA-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Lead	**12.6**	1	0.128	0.5	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 13:50	**Site:**			
Sample #:	**418214-010**	**Client Sample #:**	B83BB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Lead	**9.20**	1	0.128	0.5	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 14:05	**Site:**			
Sample #:	**418214-011**	**Client Sample #:**	B12DD-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205323	
Lead	**92.5**	1	0.128	0.5	mg/Kg	08/13/19	08/14/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 14:15	**Site:**			
Sample #:	**418214-012**	**Client Sample #:**	B12AA-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205324	
Lead	**9.71**	1	0.128	0.5	mg/Kg	08/13/19	08/20/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 14:20	**Site:**			
Sample #:	**418214-013**	**Client Sample #:**	B12BB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205324	
Lead	**190**	1	0.128	0.5	mg/Kg	08/13/19	08/20/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 14:30	**Site:**			
Sample #:	**418214-014**	**Client Sample #:**	B12CC-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205324	
Lead	**6.09**	1	0.128	0.5	mg/Kg	08/13/19	08/20/19	JP	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/12/2019 14:45	**Site:**			
Sample #:	**418214-015**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3010A						QCBatchID:	QC1205303	
Arsenic	ND	1	0.31	2	ug/L		08/13/19	JP	
Lead	ND	1	0.76	5	ug/L		08/13/19	JP	

QCBatchID:	**QC1205303**	**Analyst:**	sbailey-woo	**Method:**	EPA 6020
Matrix:	Water	**Analyzed:**	08/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1205303MB1					
Arsenic	ND	ug/L	0.31	2	
Lead	ND	ug/L	0.76	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205303LCS1											
Arsenic	50		44.7		ug/L	89			80-120		
Lead	50		57.1		ug/L	114			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205303MS1, QC1205303MSD1												**Source: 418214-015**
Arsenic	ND	50	50	42.8	45.4	ug/L	86	91	5.9	75-125	20	
Lead	ND	50	50	55.9	55.8	ug/L	112	112	0.2	75-125	20	

QCBatchID:	**QC1205323**	**Analyst:**	JParedes	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	08/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1205323MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205323LCS1											
Arsenic	50		53.0		mg/Kg	106			80-120		
Lead	50		54.4		mg/Kg	109			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205323MS1, QC1205323MSD1												**Source: 416462-008**
Arsenic	8.75	50	50	59.1	58.8	mg/Kg	101	100	0.5	75-125	20	
Lead	4.72	50	50	52.0	51.3	mg/Kg	95	93	1.4	75-125	20	

QCBatchID:	**QC1205324**	**Analyst:**	JParedes	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	08/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1205324MB1					
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205324LCS1											
Lead	50		52.9		mg/Kg	106			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205324MS1, QC1205324MSD1												**Source: 418214-012**
Lead	9.71	50	50	55.4	49.6	mg/Kg	91	80	11.0	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: 418214 Page: 1 of 2	Standard: X 4 Day: 3 Day: 2 Day: 1 Day: Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare.steedman	Number:	5030.008.003
Email:	Clare.steedman@terraphase.com	P.O. #:	
Address:	19801 Von Karman Ave	Address:	2955 S Robertson
	St 410 Irvine CA 92612		BLVD, LA, CA
Phone:	949-337-2227 x89	Global ID:	–
Fax:		Sampled By:	Wes Skillings

Analysis Request

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	6020 Arsenic	6020 PB (lead)	Hold								Test Instructions / Comments
1	B20B-0.5	8/12/19	1235	S	802	N	X										~~Results in Dr~~
2	B11B-2.5		1250				X										~~Weight~~
3	B11B-3.5		1252						X								Esdat EDD ~~+ EDF~~
4	B11D-1.5		1305				X										
5	B41B-1.5		1320					X									
6	B70B-1.5		1330				X										
7	B83C-0.5		1340					X									
8	B83D-0.5		1345					X									
9	B83A-0.5		1344					X									
10	B83B-0.5		1350					X									

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Wes Skillings	TEI - Geologist	1515 8/12/19
1 Received By:	[signature]	Ben Salgado	E.A.	1515 8.12.19
2 Relinquished By:	[signature]	Ben Salgado	Enthalpy Analytical	1829 - 8.12.19
2 Received By:	[signature]	[signature]	[signature]	8/12/19 1829
3 Relinquished By:				
3 Received By:				

1.8/0.7

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 2 of 2	Standard: X 4 Day: 3 Day: 2 Day: 1 Day: Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton H5
Report To:	Clare Steedman	Number:	5030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	
Address:	18401 Von Karman ave.	Address:	2955 S Roberston
	#410, Irvine CA 92612		Bldg CA, CA
Phone:	949-337-2237 x89	Global ID:	–
Fax:		Sampled By:	Wes Skillings

Analysis Request: 6020 Arsenic; 6020 lead; 6020 Arsenic Aa; 6020 Lead Aa

Test Instructions / Comments: ~~Results in Dry weight~~, Esdat EDP + ~~EDP~~

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	6020 Arsenic	6020 lead	6020 Arsenic Aa	6020 Lead Aa							Test Instructions / Comments
1	B12D-0.5	8/12/19	1405	S	8oz	N		X									
2	B12A-0.5	↓	1415	↓	↓	↓		X									
3	B12B-0.5	↓	1420	↓	↓	↓		X									
4	B12C-0.5	↓	1430	↓	↓	↓		X									
5	~~EB-01~~ EB-01	↓	1445	W	250 PK	Y			+	+							
6																	
7																	
8																	
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Wes Skilling	TEI - Geologist	1515 / 8/12/19
1 Received By:	[signature]	[signature]	E.A.	1515 8.17.19
2 Relinquished By:	[signature]	[signature]	E.A.	8.12.19 1830
2 Received By:	[signature]	[signature]	[signature]	8/12/19 1830
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Project: Hamilton HS

Date Received: 8/12/19 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 1.8 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.2 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: [signature] Date: 8/12/19

Enthalpy Analytical, LLC

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Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	Terraphase Engineering	Lab Request:	418425
Address:	18401 Von Karman Ave, Suite #410 Irvine, CA 92612	Report Date:	08/28/2019
		Date Received:	08/16/2019
		Client ID:	15743
Attn:	Clare Steedman		
Comments:	Hamilton HS S030.008 Revised Report		

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
418425-001	B25-BB-0.5
418425-002	B25-DD-0.5
418425-003	B03-CC-1.5

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Diane M. Galvan

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/16/2019 08:20	**Site:**			
Sample #:	**418425-001**	**Client Sample #:**	B25-BB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205736	
Lead	**54.4**	1	0.128	0.5	mg/Kg		08/22/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/16/2019 08:26	**Site:**			
Sample #:	**418425-002**	**Client Sample #:**	B25-DD-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205736	
Lead	**37.6**	1	0.128	0.5	mg/Kg		08/22/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	08/16/2019 09:00	**Site:**			
Sample #:	**418425-003**	**Client Sample #:**	B03-CC-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1205736	
Lead	**8.82**	1	0.128	0.5	mg/Kg		08/22/19	JP	

QCBatchID: QC1205736	Analyst: sbailey-woo	Method: EPA 6020
Matrix: Solid	Analyzed: 08/22/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1205736MB1					
Antimony	ND	mg/Kg	0.282	0.5	
Arsenic	ND	mg/Kg	0.108	0.3	
Barium	ND	mg/Kg	0.209	0.5	
Beryllium	ND	mg/Kg	0.16	0.5	
Cadmium	ND	mg/Kg	0.141	0.5	
Chromium	ND	mg/Kg	0.372	0.5	
Cobalt	ND	mg/Kg	0.13	0.5	
Copper	ND	mg/Kg	0.181	0.5	
Lead	ND	mg/Kg	0.128	0.5	
Molybdenum	ND	mg/Kg	0.125	0.5	
Nickel	ND	mg/Kg	0.381	0.5	
Selenium	ND	mg/Kg	0.199	0.5	
Silver	ND	mg/Kg	0.136	0.5	
Thallium	ND	mg/Kg	0.128	0.5	
Vanadium	ND	mg/Kg	0.155	0.5	
Zinc	ND	mg/Kg	0.756	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205736LCS1											
Antimony	50		57.2		mg/Kg	114			80-120		
Arsenic	50		49.8		mg/Kg	100			80-120		
Barium	50		49.9		mg/Kg	100			80-120		
Beryllium	50		69.4		mg/Kg	139			80-120		L
Cadmium	50		45.5		mg/Kg	91			80-120		
Chromium	50		45.1		mg/Kg	90			80-120		
Cobalt	50		51.4		mg/Kg	103			80-120		
Copper	50		53.4		mg/Kg	107			80-120		
Lead	50		50.5		mg/Kg	101			80-120		
Molybdenum	50		45.2		mg/Kg	90			80-120		
Nickel	50		54.5		mg/Kg	109			80-120		
Selenium	50		49.9		mg/Kg	100			80-120		
Silver	50		44.9		mg/Kg	90			80-120		
Thallium	50		50.8		mg/Kg	102			80-120		
Vanadium	50		46.9		mg/Kg	94			80-120		
Zinc	50		46.2		mg/Kg	92			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205736MS1, QC1205736MSD1												**Source: 418425-001**
Antimony	0.291	50	50	7.34	6.93	mg/Kg	14	13	5.7	75-125	20	M
Arsenic	6.14	50	50	46.9	46.4	mg/Kg	82	81	1.1	75-125	20	
Barium	137	50	50	252	243	mg/Kg	230	212	3.6	75-125	20	M
Beryllium	0.227	50	50	42.7	43.3	mg/Kg	85	86	1.4	75-125	20	
Cadmium	0.896	50	50	57.4	55.7	mg/Kg	113	110	3.0	75-125	20	
Chromium	28.0	50	50	82.8	80.3	mg/Kg	110	105	3.1	75-125	20	
Cobalt	6.99	50	50	51.5	50.6	mg/Kg	89	87	1.8	75-125	20	
Copper	15.9	50	50	63.4	62.1	mg/Kg	95	92	2.1	75-125	20	
Lead	54.4	50	50	123	118	mg/Kg	137	127	4.1	75-125	20	M
Molybdenum	2.59	50	50	47.7	46.4	mg/Kg	90	88	2.8	75-125	20	

QCBatchID:	**QC1205736**	**Analyst:**	sbailey-woo	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	08/22/2019	**Instrument:**	AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1205736MS1, QC1205736MSD1											**Source:**	**418425-001**
Nickel	18.7	50	50	71.0	68.2	mg/Kg	105	99	4.0	75-125	20	
Selenium	ND	50	50	52.6	51.0	mg/Kg	105	102	3.1	75-125	20	
Silver	ND	50	50	47.2	45.5	mg/Kg	94	91	3.7	75-125	20	
Thallium	0.209	50	50	48.8	46.4	mg/Kg	97	92	5.0	75-125	20	
Vanadium	32.3	50	50	70.2	68.4	mg/Kg	76	72	2.6	75-125	20	M
Zinc	79.0	50	50	173	165	mg/Kg	188	172	4.7	75-125	20	M

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 418425

Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Matrix: A = Air S = Soil/Solid
W = Water DW = Drinking Wate SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3
4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp:

(lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Quote #:	
Report To:	Clare Steedman	Proj. Name:	Hamilton HS
Email:	clare.steedman@terraphase.com	Proj. #:	5030.008
Address:	18401 Von Karman Ave Ste 410	P.O. #:	
	Irvine, CA 92612	Address:	2955 S Robertson Blvd
Phone:	949-377-2227	Global ID:	Los Angeles, CA
Fax:		Sampled By:	T. Rickard

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request: Lead (EPA 6020)	Test Instructions / Comments
1	~~B03-B-0.5~~ TJR	~~8/16/19~~ 8/16/19						
2	B25-B-0.5	8/16/19	0820	S	1x8oz Jar	Ice	X	
3	B25-D-0.5	↓	0826	↓	↓	↓	X	
4	B03-CC-1.5	8/16/19	0900	S	1x8oz Jar	Ice	X	
5								
6								
7								
8								
9								
10								

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	8/16/19 1153
1 Received By:	[signature]	C. Hernandez	E.A	8/16/19 1155
2 Relinquished By:				
2 Received By:				
3 Relinquished By:				
3 Received By:				

6.8 0.3

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Project: _____

Date Received: 08/16/19 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 6.8 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.3 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 8/16/19

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Terraphase Engineering
Address: 18401 Von Karman Ave, Suite #410
Irvine, CA 92612

Attn: Clare Steedman

Lab Request: 421801
Report Date: 12/05/2019
Date Received: 11/25/2019
Client ID: 15743

Comments: Hamilton HS
#S030.008.003
2295 Robertson Blvd, Los Angeles, CA

Revised report to show Arsenic result for sample B20-BBB-0.5-DUP.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID
421801-001	SV117-5.0	421801-025	SV119-10.0
421801-002	SV117-10.0	421801-026	SV119-15.0
421801-003	SV117-15.0	421801-027	SV119-25.0
421801-004	SV117-15.0-DUP	421801-028	SV122-5.0
421801-005	SV117-25.0	421801-029	SV122-10.0
421801-006	SV119-5.0	421801-030	SV122-15.0
421801-007	SV118-5.0	421801-031	SV122-25.0
421801-008	SV118-10.0	421801-032	SV122-25.0-DUP
421801-009	SV118-15.0	421801-033	B12-BBB-0.5-DUP
421801-010	SV118-25.0	421801-034	B20-BBB-0.5-DUP
421801-011	SV121-5.0	421801-035	EB-01
421801-012	SV120-5.0		
421801-013	SV120-5.0-DUP		
421801-014	SV120-10.0		
421801-015	SV120-15.0		
421801-016	SV120-25.0		
421801-017	B11-DDD-1.5		
421801-018	B20-BBB-0.5		
421801-019	B20-BBBB-0.5		
421801-020	SV121-10.0		
421801-021	SV121-15.0		
421801-022	SV121-25.0		
421801-023	B12-BBB-0.5		
421801-024	B12-BBBB-0.5		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Patricia Mata, PM

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:35	**Site:**			
Sample #:	**421801-001**	**Client Sample #:**	SV117-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	**0.32 J**	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**2.2 J**	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.30 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:35	**Site:**			
Sample #:	**421801-001**	**Client Sample #:**	SV117-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*109*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:45	**Site:**			
Sample #:	**421801-002**	**Client Sample #:**	SV117-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**0.86 J**	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**1.1 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	**2.3 J**	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:45	**Site:**			
Sample #:	**421801-002**	**Client Sample #:**	SV117-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.40 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*108*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:00	**Site:**			
Sample #:	**421801-003**	**Client Sample #:**	SV117-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.47 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:00	**Site:**			
Sample #:	**421801-003**	**Client Sample #:**	SV117-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.14 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*106*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:02	**Site:**			
Sample #:	**421801-004**	**Client Sample #:**	SV117-15.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.40 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:02	**Site:**			
Sample #:	**421801-004**	**Client Sample #:**	SV117-15.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.13 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*108*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:05	**Site:**			
Sample #:	**421801-005**	**Client Sample #:**	SV117-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.15 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:05	**Site:**			
Sample #:	**421801-005**	**Client Sample #:**	SV117-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*113*	*70-145*	
4-Bromofluorobenzene (SUR)	*117*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:30	**Site:**			
Sample #:	**421801-006**	**Client Sample #:**	SV119-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**4.5 J**	1	0.72	100	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	
Acetone	**87 J**	1	50	100	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
Benzene	**0.44 J**	1	0.18	5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:30	**Site:**			
Sample #:	**421801-006**	**Client Sample #:**	SV119-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/25/19	ZZ	
Styrene	ND	1	0.13	5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Toluene	**0.21 J**	1	0.17	5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*107*	*70-145*	
4-Bromofluorobenzene (SUR)	*118*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:40	**Site:**			
Sample #:	**421801-007**	**Client Sample #:**	SV118-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**1.7 J**	0.9	0.648	90	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.33 J**	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:40	**Site:**			
Sample #:	**421801-007**	**Client Sample #:**	SV118-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.18 J**	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*106*	*70-145*	
4-Bromofluorobenzene (SUR)	*117*	*70-145*	
Dibromofluoromethane (SUR)	*101*	*70-145*	
Toluene-d8 (SUR)	*102*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:00	**Site:**			
Sample #:	**421801-008**	**Client Sample #:**	SV118-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Benzene	**0.23 J**	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:00	**Site:**			
Sample #:	**421801-008**	**Client Sample #:**	SV118-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Toluene	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*121*	*70-145*	
4-Bromofluorobenzene (SUR)	*88*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:04	**Site:**			
Sample #:	**421801-009**	**Client Sample #:**	SV118-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**0.88 J**	0.7	0.504	70	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.53 J**	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:04	**Site:**			
Sample #:	**421801-009**	**Client Sample #:**	SV118-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.19 J**	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*121*	*70-145*	
4-Bromofluorobenzene (SUR)	*93*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:12	**Site:**			
Sample #:	**421801-010**	**Client Sample #:**	SV118-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209213	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.9	0.648	90	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Benzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:12	**Site:**			
Sample #:	**421801-010**	**Client Sample #:**	SV118-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*119*	*70-145*	
4-Bromofluorobenzene (SUR)	*91*	*70-145*	
Dibromofluoromethane (SUR)	*99*	*70-145*	
Toluene-d8 (SUR)	*103*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:55	**Site:**			
Sample #:	**421801-011**	**Client Sample #:**	SV121-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	1.1	0.264	5.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	1.1	0.165	5.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	1.1	0.319	5.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1.1	0.814	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	1.1	0.363	5.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	1.1	0.308	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	1.1	0.132	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	1.1	0.374	5.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	1.1	0.264	5.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**4.2 J**	1.1	0.792	110	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	1.1	0.297	5.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	1.1	55	110	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.31 J**	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	1.1	0.33	5.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1.1	0.462	5.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	1.1	0.462	5.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	1.1	0.418	5.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	**1.1 J**	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:55	**Site:**			
Sample #:	**421801-011**	**Client Sample #:**	SV121-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1.1	0.176	5.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	1.1	0.308	5.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	1.1	0.143	5.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	1.1	9.68	11	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	1.1	0.374	5.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.21 J**	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	1.1	0.418	5.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*116*	*70-145*	
4-Bromofluorobenzene (SUR)	*91*	*70-145*	
Dibromofluoromethane (SUR)	*101*	*70-145*	
Toluene-d8 (SUR)	*105*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:10	**Site:**			
Sample #:	**421801-012**	**Client Sample #:**	SV120-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**5.1 J**	0.9	0.648	90	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Acetone	**53 J**	0.9	45	90	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.40 J**	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:10	**Site:**			
Sample #:	**421801-012**	**Client Sample #:**	SV120-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.20 J**	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*108*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:12	**Site:**			
Sample #:	**421801-013**	**Client Sample #:**	SV120-5.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**4.6 J**	0.9	0.648	90	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Acetone	**56 J**	0.9	45	90	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.41 J**	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:12	**Site:**			
Sample #:	**421801-013**	**Client Sample #:**	SV120-5.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.18 J**	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:25	**Site:**			
Sample #:	**421801-014**	**Client Sample #:**	SV120-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.35 J**	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:25	**Site:**			
Sample #:	**421801-014**	**Client Sample #:**	SV120-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.15 J**	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*97*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:30	**Site:**			
Sample #:	**421801-015**	**Client Sample #:**	SV120-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.6	0.144	3	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.6	0.09	3	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.6	0.174	3	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.6	0.444	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.6	0.198	3	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.6	0.168	3	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.6	0.072	3	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.6	0.204	3	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.6	0.144	3	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.6	0.432	60	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.6	0.162	3	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.6	30	60	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
Benzene	**0.62 J**	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.6	0.18	3	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.6	0.252	3	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.6	0.252	3	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.6	0.228	3	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:30	**Site:**			
Sample #:	**421801-015**	**Client Sample #:**	SV120-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.6	0.096	3	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.6	0.168	3	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.6	0.078	3	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.6	5.28	6	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.6	0.204	3	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Toluene	**0.16 J**	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.6	0.228	3	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:40	**Site:**			
Sample #:	**421801-016**	**Client Sample #:**	SV120-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Benzene	**0.27 J**	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:40	**Site:**			
Sample #:	**421801-016**	**Client Sample #:**	SV120-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Toluene	**0.29 J**	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:05	**Site:**			
Sample #:	**421801-017**	**Client Sample #:**	B11-DDD-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**54.6**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:37	**Site:**			
Sample #:	**421801-018**	**Client Sample #:**	B20-BBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**43.9**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:41	**Site:**			
Sample #:	**421801-019**	**Client Sample #:**	B20-BBBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:57	**Site:**			
Sample #:	**421801-020**	**Client Sample #:**	SV121-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.49 J**	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:57	**Site:**			
Sample #:	**421801-020**	**Client Sample #:**	SV121-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Toluene	**0.18 J**	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:02	**Site:**			
Sample #:	**421801-021**	**Client Sample #:**	SV121-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.64 J**	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:02	**Site:**			
Sample #:	**421801-021**	**Client Sample #:**	SV121-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Toluene	**0.20 J**	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:07	**Site:**			
Sample #:	**421801-022**	**Client Sample #:**	SV121-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.9	0.648	90	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.19 J**	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	**4.2 J**	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:07	**Site:**			
Sample #:	**421801-022**	**Client Sample #:**	SV121-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Toluene	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:58	**Site:**			
Sample #:	**421801-023**	**Client Sample #:**	B12-BBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Lead	**1030**	10	1.28	5	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:01	**Site:**			
Sample #:	**421801-024**	**Client Sample #:**	B12-BBBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:24	**Site:**			
Sample #:	**421801-025**	**Client Sample #:**	SV119-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
Benzene	**0.92 J**	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:24	**Site:**			
Sample #:	**421801-025**	**Client Sample #:**	SV119-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Toluene	**0.33 J**	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*102*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:30	**Site:**			
Sample #:	**421801-026**	**Client Sample #:**	SV119-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.97 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:30	**Site:**			
Sample #:	**421801-026**	**Client Sample #:**	SV119-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.33 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*106*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:00	**Site:**			
Sample #:	**421801-027**	**Client Sample #:**	SV119-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	**2.1 J**	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.63 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:00	**Site:**			
Sample #:	**421801-027**	**Client Sample #:**	SV119-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.38 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:42	**Site:**			
Sample #:	**421801-028**	**Client Sample #:**	SV122-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.49 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:42	**Site:**			
Sample #:	**421801-028**	**Client Sample #:**	SV122-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.28 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*118*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:45	**Site:**			
Sample #:	**421801-029**	**Client Sample #:**	SV122-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.45 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:45	**Site:**			
Sample #:	**421801-029**	**Client Sample #:**	SV122-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.20 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:50	**Site:**			
Sample #:	**421801-030**	**Client Sample #:**	SV122-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	**1.6 J**	1	0.72	100	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Acetone	ND	1	50	100	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Benzene	**0.97 J**	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/27/19	LZ	
Methylene chloride	**0.40 J**	1	0.21	5	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:50	**Site:**			
Sample #:	**421801-030**	**Client Sample #:**	SV122-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
Styrene	ND	1	0.13	5	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Toluene	**0.26 J**	1	0.17	5	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*111*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:55	**Site:**			
Sample #:	**421801-031**	**Client Sample #:**	SV122-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:55	**Site:**			
Sample #:	**421801-031**	**Client Sample #:**	SV122-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:57	**Site:**			
Sample #:	**421801-032**	**Client Sample #:**	SV122-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	1	0.72	100	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Acetone	ND	1	50	100	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Benzene	**0.36 J**	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/27/19	LZ	
Methylene chloride	**2.1 J**	1	0.21	5	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:57	**Site:**			
Sample #:	**421801-032**	**Client Sample #:**	SV122-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
Styrene	ND	1	0.13	5	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Toluene	**0.38 J**	1	0.17	5	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*110*	*70-145*	
Dibromofluoromethane (SUR)	*102*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:00	**Site:**			
Sample #:	**421801-033**	**Client Sample #:**	B12-BBB-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Lead	**32.0**	1	0.128	0.5	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:39	**Site:**			
Sample #:	**421801-034**	**Client Sample #:**	B20-BBB-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**56.9**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:30	**Site:**			
Sample #:	**421801-035**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3010A							QCBatchID: QC1209268		
Arsenic	ND	1	0.008	0.01	mg/L		11/27/19	KLN	
Lead	ND	1	0.005	0.01	mg/L		11/27/19	KLN	
Method: EPA 8260B *NELAC* Prep Method: EPA 5030B							QCBatchID: QC1209237		
1,1,1,2-Tetrachloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,1-Trichloroethane	ND	1	0.38	5	ug/L		11/26/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,2-Trichloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.29	5	ug/L		11/26/19	LZ	
1,1-Dichloroethane	ND	1	0.32	5	ug/L		11/26/19	LZ	
1,1-Dichloroethene	ND	1	0.3	5	ug/L		11/26/19	LZ	
1,1-Dichloropropene	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.28	5	ug/L		11/26/19	LZ	
1,2,3-Trichloropropane	ND	1	0.16	5	ug/L		11/26/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.27	5	ug/L		11/26/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/L		11/26/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.12	5	ug/L		11/26/19	LZ	
1,2-Dibromoethane	ND	1	0.19	5	ug/L		11/26/19	LZ	
1,2-Dichlorobenzene	ND	1	0.26	5	ug/L		11/26/19	LZ	
1,2-Dichloroethane	ND	1	0.2	5	ug/L		11/26/19	LZ	
1,2-Dichloropropane	ND	1	0.36	5	ug/L		11/26/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.24	5	ug/L		11/26/19	LZ	
1,3-Dichlorobenzene	ND	1	0.34	5	ug/L		11/26/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/L		11/26/19	LZ	
1,4-Dichlorobenzene	ND	1	0.43	5	ug/L		11/26/19	LZ	
2,2-Dichloropropane	ND	1	0.32	5	ug/L		11/26/19	LZ	
2-Butanone (MEK)	ND	1	0.78	100	ug/L		11/26/19	LZ	
2-Chlorotoluene	ND	1	0.33	5	ug/L		11/26/19	LZ	
4-Chlorotoluene	ND	1	0.31	5	ug/L		11/26/19	LZ	
4-Isopropyltoluene	ND	1	0.32	5	ug/L		11/26/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.12	5	ug/L		11/26/19	LZ	
Acetone	ND	1	50	100	ug/L		11/26/19	LZ	
Allyl Chloride	ND	1	0.19	5	ug/L		11/26/19	LZ	
Benzene	ND	1	0.18	1	ug/L		11/26/19	LZ	
Bromobenzene	ND	1	0.53	5	ug/L		11/26/19	LZ	
Bromochloromethane	ND	1	0.17	5	ug/L		11/26/19	LZ	
Bromodichloromethane	ND	1	0.31	5	ug/L		11/26/19	LZ	
Bromoform	ND	1	0.13	5	ug/L		11/26/19	LZ	
Bromomethane	ND	1	0.68	5	ug/L		11/26/19	LZ	
Carbon Tetrachloride	ND	1	0.27	5	ug/L		11/26/19	LZ	
Chlorobenzene	ND	1	0.19	5	ug/L		11/26/19	LZ	
Chlorodibromomethane	ND	1	0.21	5	ug/L		11/26/19	LZ	
Chloroethane	ND	1	0.45	5	ug/L		11/26/19	LZ	
Chloroform	ND	1	0.18	5	ug/L		11/26/19	LZ	
Chloromethane	ND	1	0.27	5	ug/L		11/26/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.27	5	ug/L		11/26/19	LZ	
cis-1,3-dichloropropene	ND	1	0.25	5	ug/L		11/26/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		11/26/19	LZ	
Dibromomethane	ND	1	0.23	5	ug/L		11/26/19	LZ	
Dichlorodifluoromethane	ND	1	0.33	5	ug/L		11/26/19	LZ	
Ethylbenzene	ND	1	0.21	5	ug/L		11/26/19	LZ	
Hexachlorobutadiene	ND	1	0.51	5	ug/L		11/26/19	LZ	
Isopropylbenzene	ND	1	0.24	5	ug/L		11/26/19	LZ	
m and p-Xylene	ND	1	0.45	5	ug/L		11/26/19	LZ	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:30	**Site:**			
Sample #:	**421801-035**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Methylene chloride	ND	1	0.16	5	ug/L		11/26/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L		11/26/19	LZ	
Naphthalene	ND	1	0.25	5	ug/L		11/26/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/L		11/26/19	LZ	
N-propylbenzene	ND	1	0.31	5	ug/L		11/26/19	LZ	
o-Xylene	ND	1	0.29	5	ug/L		11/26/19	LZ	
Sec-butylbenzene	ND	1	0.32	5	ug/L		11/26/19	LZ	
Styrene	ND	1	0.22	5	ug/L		11/26/19	LZ	
Tert-butylbenzene	ND	1	0.4	5	ug/L		11/26/19	LZ	
Tetrachloroethene	ND	1	0.18	5	ug/L		11/26/19	LZ	
Toluene	ND	1	0.24	5	ug/L		11/26/19	LZ	
trans-1,2-dichloroethene	ND	1	0.33	5	ug/L		11/26/19	LZ	
trans-1,3-dichloropropene	ND	1	0.23	5	ug/L		11/26/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		11/26/19	LZ	
Trichloroethene	ND	1	0.39	5	ug/L		11/26/19	LZ	
Trichlorofluoromethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
Vinyl Chloride	ND	1	0.18	5	ug/L		11/26/19	LZ	
Xylenes (Total)	ND	1	0.45	5	ug/L		11/26/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*102*	*70-145*	
4-Bromofluorobenzene (SUR)	*118*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

QCBatchID: QC1209213	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209213MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	

QCBatchID: QC1209213	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209213MB1					
Methylene chloride	**1.9 J**	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209213LCS1, QC1209213LCSD1											
1,1-Dichloroethene	50	50	59	56	ug/Kg	118	112	5	59-172	22	
Benzene	50	50	49	46	ug/Kg	98	92	6	62-137	24	
Chlorobenzene	50	50	46	44	ug/Kg	92	88	4	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	41	40	ug/Kg	82	80	2	62-137	21	
Toluene	50	50	51	47	ug/Kg	102	94	8	59-139	21	
Trichloroethene	50	50	53	47	ug/Kg	106	94	12	66-142	21	

QCBatchID: QC1209223	Analyst: sandyw	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209223MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	

QCBatchID: QC1209223	Analyst: sandyw	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209223MB1					
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209223LCS1											
1,1-Dichloroethene	50		55		ug/Kg	110			59-172		
Benzene	50		49		ug/Kg	98			62-137		
Chlorobenzene	50		52		ug/Kg	104			60-133		
Methyl-t-butyl Ether (MTBE)	50		43		ug/Kg	86			62-137		
Toluene	50		51		ug/Kg	102			59-139		
Trichloroethene	50		58		ug/Kg	116			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209223MS1, QC1209223MSD1												**Source: 421780-006**
1,1-Dichloroethene	ND	50	50	55	53	ug/Kg	110	106	3.7	59-172	22	
Benzene	ND	50	50	50	48	ug/Kg	100	96	4.1	62-137	24	
Chlorobenzene	ND	50	50	48	47	ug/Kg	96	94	2.1	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	44	45	ug/Kg	88	90	2.2	62-137	21	
Toluene	ND	50	50	47	46	ug/Kg	94	92	2.2	59-139	21	
Trichloroethene	ND	50	50	52	49	ug/Kg	104	98	5.9	66-142	21	

QCBatchID: QC1209237	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209237MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,1-Trichloroethane	ND	ug/L	0.38	5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,2-Trichloroethane	ND	ug/L	0.25	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.29	5	
1,1-Dichloroethane	ND	ug/L	0.32	5	
1,1-Dichloroethene	ND	ug/L	0.3	5	
1,1-Dichloropropene	ND	ug/L	0.25	5	
1,2,3-Trichlorobenzene	ND	ug/L	0.28	5	
1,2,3-Trichloropropane	ND	ug/L	0.16	5	
1,2,4-Trichlorobenzene	ND	ug/L	0.27	5	
1,2,4-Trimethylbenzene	ND	ug/L	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.12	5	
1,2-Dibromoethane	ND	ug/L	0.19	5	
1,2-Dichlorobenzene	ND	ug/L	0.26	5	
1,2-Dichloroethane	ND	ug/L	0.2	5	
1,2-Dichloropropane	ND	ug/L	0.36	5	
1,3,5-Trimethylbenzene	ND	ug/L	0.24	5	
1,3-Dichlorobenzene	ND	ug/L	0.34	5	
1,3-Dichloropropane	ND	ug/L	0.19	5	
1,4-Dichlorobenzene	ND	ug/L	0.43	5	
2,2-Dichloropropane	ND	ug/L	0.32	5	
2-Butanone (MEK)	ND	ug/L	0.78	100	
2-Chlorotoluene	ND	ug/L	0.33	5	
4-Chlorotoluene	ND	ug/L	0.31	5	
4-Isopropyltoluene	ND	ug/L	0.32	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.12	5	
Acetone	ND	ug/L	50	100	
Allyl Chloride	ND	ug/L	0.19	5	
Benzene	ND	ug/L	0.18	1	
Bromobenzene	ND	ug/L	0.53	5	
Bromochloromethane	ND	ug/L	0.17	5	
Bromodichloromethane	ND	ug/L	0.31	5	
Bromoform	ND	ug/L	0.13	5	
Bromomethane	ND	ug/L	0.68	5	
Carbon Tetrachloride	ND	ug/L	0.27	5	
Chlorobenzene	ND	ug/L	0.19	5	
Chlorodibromomethane	ND	ug/L	0.21	5	
Chloroethane	ND	ug/L	0.45	5	
Chloroform	ND	ug/L	0.18	5	
Chloromethane	ND	ug/L	0.27	5	
cis-1,2-Dichloroethene	ND	ug/L	0.27	5	
cis-1,3-dichloropropene	ND	ug/L	0.25	5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Dibromomethane	ND	ug/L	0.23	5	
Dichlorodifluoromethane	ND	ug/L	0.33	5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	1	
Ethylbenzene	ND	ug/L	0.21	5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.23	1	
Hexachlorobutadiene	ND	ug/L	0.51	5	
Isopropylbenzene	ND	ug/L	0.24	5	
m and p-Xylene	ND	ug/L	0.45	5	

QCBatchID: QC1209237	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209237MB1					
Methylene chloride	**0.70 J**	ug/L	0.16	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.19	1	
Naphthalene	ND	ug/L	0.25	5	
N-butylbenzene	ND	ug/L	0.25	5	
N-propylbenzene	ND	ug/L	0.31	5	
o-Xylene	ND	ug/L	0.29	5	
Sec-butylbenzene	ND	ug/L	0.32	5	
Styrene	ND	ug/L	0.22	5	
t-Butyl alcohol (TBA)	ND	ug/L	5.2	10	
Tert-amylmethylether (TAME)	ND	ug/L	0.19	5	
Tert-butylbenzene	ND	ug/L	0.4	5	
Tetrachloroethene	ND	ug/L	0.8	5	
Toluene	ND	ug/L	0.24	5	
trans-1,2-dichloroethene	ND	ug/L	0.33	5	
trans-1,3-dichloropropene	ND	ug/L	0.23	5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Trichloroethene	ND	ug/L	0.39	5	
Trichlorofluoromethane	ND	ug/L	0.25	5	
Vinyl Chloride	ND	ug/L	0.18	5	
Xylenes (Total)	ND	ug/L	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209237LCS1											
1,1-Dichloroethene	50		56		ug/L	112			59-172		
Benzene	50		49		ug/L	98			62-137		
Chlorobenzene	50		51		ug/L	102			60-133		
Methyl-t-butyl Ether (MTBE)	50		43		ug/L	86			62-137		
Toluene	50		49		ug/L	98			59-139		
Trichloroethene	50		54		ug/L	108			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209237MS1, QC1209237MSD1												**Source: 421782-006**
1,1-Dichloroethene	4.8	50	50	60	55	ug/L	110	100	8.7	59-172	22	
Benzene	1.1	50	50	52	49	ug/L	102	96	5.9	62-137	24	
Chlorobenzene	ND	50	50	52	50	ug/L	104	100	3.9	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	48	48	ug/L	96	96	0.0	62-137	21	
Toluene	ND	50	50	49	48	ug/L	98	96	2.1	59-139	21	
Trichloroethene	2800	50	50	2500	2300	ug/L	0	0	8.3	66-142	21	NC

QCBatchID: QC1209240	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209240MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	

QCBatchID: QC1209240	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209240MB1					
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209240LCS1											
1,1-Dichloroethene	50		61		ug/Kg	122			59-172		
Benzene	50		49		ug/Kg	98			62-137		
Chlorobenzene	50		47		ug/Kg	94			60-133		
Methyl-t-butyl Ether (MTBE)	50		34		ug/Kg	68			62-137		
Toluene	50		53		ug/Kg	106			59-139		
Trichloroethene	50		54		ug/Kg	108			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209240MS1, QC1209240MSD1												**Source: 421798-004**
1,1-Dichloroethene	ND	50	50	56	53	ug/Kg	112	106	5.5	59-172	22	
Benzene	ND	50	50	48	47	ug/Kg	96	94	2.1	62-137	24	
Chlorobenzene	ND	50	50	44	42	ug/Kg	88	84	4.7	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	44	44	ug/Kg	88	88	0.0	62-137	21	
Toluene	ND	50	50	47	46	ug/Kg	94	92	2.2	59-139	21	
Trichloroethene	ND	50	50	47	46	ug/Kg	94	92	2.2	66-142	21	

QCBatchID:	**QC1209246**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	11/26/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209246MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1209246LCS1											
Arsenic	50		45.0		mg/Kg	90			80-120		
Lead	50		46.6		mg/Kg	93			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1209246MS1, QC1209246MSD1												**Source: 421785-001**
Arsenic	4.81	50	50	39.4	42.0	mg/Kg	69	74	6.4	75-125	20	M
Lead	4.81	50	50	42.1	45.6	mg/Kg	75	82	8.0	75-125	20	M

QCBatchID: QC1209262	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209262MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209262	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209262MB1					
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209262LCS1, QC1209262LCSD1											
1,1-Dichloroethene	50	50	58	58	ug/Kg	116	116	0	59-172	22	
Benzene	50	50	51	52	ug/Kg	102	104	2	62-137	24	
Chlorobenzene	50	50	52	53	ug/Kg	104	106	2	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	43	44	ug/Kg	86	88	2	62-137	21	
Toluene	50	50	51	53	ug/Kg	102	106	4	59-139	21	
Trichloroethene	50	50	58	59	ug/Kg	116	118	2	66-142	21	

QCBatchID: QC1209268	Analyst: rvenegas	Method: EPA 6010B
Matrix: Water	Analyzed: 11/26/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209268MB1					
Antimony	**0.044**	mg/L	0.014	0.04	B
Arsenic	ND	mg/L	0.008	0.01	
Barium	ND	mg/L	0.002	0.01	
Beryllium	ND	mg/L	0.001	0.005	
Cadmium	ND	mg/L	0.002	0.005	
Chromium	ND	mg/L	0.002	0.01	
Cobalt	ND	mg/L	0.002	0.005	
Copper	ND	mg/L	0.001	0.01	
Lead	ND	mg/L	0.005	0.01	
Molybdenum	ND	mg/L	0.005	0.01	
Nickel	ND	mg/L	0.003	0.02	
Selenium	**0.029 J**	mg/L	0.016	0.03	
Silver	ND	mg/L	0.003	0.005	
Thallium	ND	mg/L	0.009	0.05	
Tin	ND	mg/L	0.008	0.05	
Titanium	ND	mg/L	0.002	0.01	
Vanadium	ND	mg/L	0.002	0.005	
Zinc	ND	mg/L	0.017	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268LCS1											
Antimony	2		2.02		mg/L	101			80-120		
Arsenic	2		2.02		mg/L	101			80-120		
Barium	2		2.10		mg/L	105			80-120		
Beryllium	2		2.10		mg/L	105			80-120		
Cadmium	2		2.17		mg/L	109			80-120		
Chromium	2		2.10		mg/L	105			80-120		
Cobalt	2		2.13		mg/L	107			80-120		
Copper	2		2.07		mg/L	104			80-120		
Lead	2		2.07		mg/L	104			80-120		
Molybdenum	2		2.05		mg/L	103			80-120		
Nickel	2		2.16		mg/L	108			80-120		
Selenium	2		2.00		mg/L	100			80-120		
Silver	2		2.08		mg/L	104			80-120		
Thallium	2		2.08		mg/L	104			80-120		
Vanadium	2		2.20		mg/L	110			80-120		
Zinc	2		2.30		mg/L	115			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268MS1, QC1209268MSD1												**Source: 421801-035**
Antimony	0.036	1	1	1.04	1.03	mg/L	100	99	1.0	75-125	20	
Arsenic	ND	1	1	1.03	0.998	mg/L	103	100	3.2	75-125	20	
Barium	ND	1	1	1.07	1.06	mg/L	107	106	0.9	75-125	20	
Beryllium	ND	1	1	0.955	1.000	mg/L	96	100	4.6	75-125	20	
Cadmium	ND	1	1	1.10	1.09	mg/L	110	109	0.9	75-125	20	
Chromium	ND	1	1	1.07	1.06	mg/L	107	106	0.9	75-125	20	
Cobalt	ND	1	1	1.10	1.09	mg/L	110	109	0.9	75-125	20	
Copper	ND	1	1	0.952	1.00	mg/L	95	100	4.9	75-125	20	

QCBatchID: QC1209268	Analyst: rvenegas	Method: EPA 6010B
Matrix: Water	Analyzed: 11/26/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268MS1, QC1209268MSD1												**Source: 421801-035**
Lead	ND	1	1	1.08	1.06	mg/L	108	106	1.9	75-125	20	
Molybdenum	ND	1	1	1.05	1.04	mg/L	105	104	1.0	75-125	20	
Nickel	ND	1	1	1.11	1.10	mg/L	111	110	0.9	75-125	20	
Selenium	0.038	1	1	1.03	1.03	mg/L	99	99	0.0	75-125	20	
Silver	ND	1	1	0.978	1.02	mg/L	98	102	4.2	75-125	20	
Thallium	ND	1	1	1.08	1.06	mg/L	108	106	1.9	75-125	20	
Vanadium	0.004	1	1	1.03	1.08	mg/L	103	108	4.7	75-125	20	
Zinc	ND	1	1	1.17	1.15	mg/L	117	115	1.7	75-125	20	

QCBatchID: QC1209345	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/27/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209345MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209345	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/27/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209345MB1					
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209345LCS1, QC1209345LCSD1											
1,1-Dichloroethene	50	50	63	62	ug/Kg	126	124	2	59-172	22	
Benzene	50	50	55	55	ug/Kg	110	110	0	62-137	24	
Chlorobenzene	50	50	55	55	ug/Kg	110	110	0	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	47	46	ug/Kg	94	92	2	62-137	21	
Toluene	50	50	55	54	ug/Kg	110	108	2	59-139	21	
Trichloroethene	50	50	58	57	ug/Kg	116	114	2	66-142	21	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: 92180	Standard: X · 4 Day: · 3 Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	Page: 1 of 4	2 Day: · 1 Day: · Same Day:

ENTHALPY ANALYTICAL

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	—
Address:	18401 Von Karman Ave, Ste410	Address:	2295 Robertson Blvd.
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	—
Fax:	—	Sampled By:	Tanner / Wes

Analysis Request: VOCs (8260)

Test Instructions / Comments: EsDat Format

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)
1	SV117-5.0	11/23/19	0835	S	3 voa	1,6	X
2	SV117-10.0		0845				X
3	SV117-15.0		0900				X
4	SV117-15.0-DUP		0902				X
5	SV117-25.0		0905				X
6	SV119-5.0		0930				X
7	SV118-5.0		0940				X
8	SV118-10.0		1000				X
9	SV118-15.0		1004				X
10	SV118-25.0	11/23/19	1012	S	3Voa	1,6	X

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	KAD TRAN	E.A	11/25/19 1420
2 Relinquished By:	[signature]	KAD TRAN	E.A	11/25/19 1543
2 Received By:	[signature]	[signature]	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 2 of 4	Standard: X 4 Day: 3 Day: 2 Day: 1 Day: Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	--
Address:	18401 Von Karman Ave. Ste 410	Address:	2295 Robertson Blvd
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	-
Fax:	-	Sampled By:	Tanner/Wes

Analysis Request: VOCs (8260); As 6020; ~~Pb 6020~~; HOLD

Test Instructions / Comments: Es Dat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)	As 6020	~~Pb 6020~~	HOLD						
1	SV121 - 5.0	11/23/19	1056	S	3 Voa	1.6	X									
2	SV120 - 5.0	↓	1110	↓	↓	↓	X									
3	SV120 - 5.0 - DUP		1112				X									
4	SV120 - 10.0		1125				X									
5	SV120 - 15.0		1130				X									
6	SV120 - 25.0		1140		3 Voa	1.6	X									
7	B11 - DDD - 1.5		1105		1x Jar	Ice		X								
8	B20 - BBB - 0.5	↓	1137		1x Jar	↓		X								
9	B20 - BBBB - 0.5		1141	↓	1 JAR	Ice		~~X~~	do	X						
10	SV121 - 10.0	11/23/19	1257	S	3 Voa	1.6	X									

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	[illegible]	E.A	11/25/19 1420
2 Relinquished By:	[signature]	[illegible]	E.A	11/25/19 1543
2 Received By:	[signature]	G Kim	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave, Orange, CA 92868	Lab No:	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 3 of 4	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - Orange	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
P.O. Box 741137, Los Angeles, CA 90074-1137							

ENTHALPY ANALYTICAL

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton MS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	-
Address:	18401 Von Karman Ave, Ste 410	Address:	2295 Robertson Blvd
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	-
Fax:	-	Sampled By:	Tanner / Wes

Analysis Request

Test Instructions / Comments: Es Dat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)	Pb (6020)	HOLD								
1	SV121-15.0	11/23/19	1302	S	3 Voa's	1,6	X										
2	SV121-25.0	↓	1307	↓	3 Voas	1,6	X										
3	B12-BBB-0.5	↓	1158	↓	1x Jar	Ice		X									
4	B12-BBBB-0.5	↓	1201	↓	1x Jar	Ice			X								
5	SV119-10.0	↓	1324	↓	3 Voa's	1,6	X										
6	SV119-15.0	↓	1330	↓	↓	↓	X										
7	SV119-25.0	↓	1400	↓	↓	↓	X										
8	SV122-5.0	↓	1342	↓	↓	↓	X										
9	SV122-10.0	↓	1345	↓	↓	↓	X										
10	SV122-15.0	11/23/19	1350	S	3 Voas	1,6	X										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	KAO TRAN	E-A	11/25/19 1420
2 Relinquished By:	[signature]	KAO TRAN	E-A	11/25/19 1543
2 Received By:	[signature]	[signature]	EA	11/28/19 1843
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 4 of 4	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton MS
Report To:	Clare Steedman	Number:	5030-008.003
Email:	clare.steedman@terraphase.com	P.O. #:	—
Address:	18401 Von Karman Ave Ste 410	Address:	2295 Robertson Blvd.
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	—
Fax:	—	Sampled By:	Tanner Weiz

Analysis Request: VOC 8260; Pb 6020; As 6020; Pb + As 6010

Test Instructions / Comments: EsDat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOC 8260	Pb 6020	As 6020	Pb + As 6010						
1	SV122 - 25.0	11/23/19	1355	S	3 VOA	1,5	X									
2	SV122 - 25.0 - DUP		1357		↓	1,6	X									
3	B12 - BBB - 0.5 - DUP		1200		1 JAR	Ice		X								
4	B20 - BBB - 0.5 - DUP		1139		1 JAR	Ice			X							
5	BB - 01	11/23/19	1430	W	500 mL, 3 VOA	3,2	X			X						
6																
7																
8																
9																
10																

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	[illegible]	E-A	11/25/19 1420
2 Relinquished By:	[signature]	[illegible]	E-A	11/25/19 1543
2 Received By:	[signature]	G. Kim	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Project: Hamilton HS

Date Received: 11/25/19 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 3.8 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.2 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?		✓	
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 11/25/19

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Terraphase Engineering
Address: 18401 Von Karman Ave, Suite #410
Irvine, CA 92612

Attn: Clare Steedman

Lab Request: 421801
Report Date: 12/20/2019
Date Received: 11/25/2019
Client ID: 15743

Comments: Hamilton HS
#S030.008.003
2295 Robertson Blvd, Los Angeles, CA

Revised report to include additional metals test results requested on 12/11/19.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID
421801-001	SV117-5.0	421801-025	SV119-10.0
421801-002	SV117-10.0	421801-026	SV119-15.0
421801-003	SV117-15.0	421801-027	SV119-25.0
421801-004	SV117-15.0-DUP	421801-028	SV122-5.0
421801-005	SV117-25.0	421801-029	SV122-10.0
421801-006	SV119-5.0	421801-030	SV122-15.0
421801-007	SV118-5.0	421801-031	SV122-25.0
421801-008	SV118-10.0	421801-032	SV122-25.0-DUP
421801-009	SV118-15.0	421801-033	B12-BBB-0.5-DUP
421801-010	SV118-25.0	421801-034	B20-BBB-0.5-DUP
421801-011	SV121-5.0	421801-035	EB-01
421801-012	SV120-5.0		
421801-013	SV120-5.0-DUP		
421801-014	SV120-10.0		
421801-015	SV120-15.0		
421801-016	SV120-25.0		
421801-017	B11-DDD-1.5		
421801-018	B20-BBB-0.5		
421801-019	B20-BBBB-0.5		
421801-020	SV121-10.0		
421801-021	SV121-15.0		
421801-022	SV121-25.0		
421801-023	B12-BBB-0.5		
421801-024	B12-BBBB-0.5		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Patricia Mata, PM

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:35	**Site:**			
Sample #:	**421801-001**	**Client Sample #:**	SV117-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	**0.32 J**	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**2.2 J**	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.30 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:35	**Site:**			
Sample #:	**421801-001**	**Client Sample #:**	SV117-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*109*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:45	**Site:**			
Sample #:	**421801-002**	**Client Sample #:**	SV117-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**0.86 J**	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**1.1 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	**2.3 J**	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:45	**Site:**			
Sample #:	**421801-002**	**Client Sample #:**	SV117-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.40 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*108*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:00	**Site:**			
Sample #:	**421801-003**	**Client Sample #:**	SV117-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.47 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:00	**Site:**			
Sample #:	**421801-003**	**Client Sample #:**	SV117-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.14 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*106*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:02	**Site:**			
Sample #:	**421801-004**	**Client Sample #:**	SV117-15.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.40 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:02	**Site:**			
Sample #:	**421801-004**	**Client Sample #:**	SV117-15.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.13 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*108*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:05	**Site:**			
Sample #:	**421801-005**	**Client Sample #:**	SV117-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.15 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:05	**Site:**			
Sample #:	**421801-005**	**Client Sample #:**	SV117-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*113*	*70-145*	
4-Bromofluorobenzene (SUR)	*117*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:30	**Site:**			
Sample #:	**421801-006**	**Client Sample #:**	SV119-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**4.5 J**	1	0.72	100	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	
Acetone	**87 J**	1	50	100	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
Benzene	**0.44 J**	1	0.18	5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:30	**Site:**			
Sample #:	**421801-006**	**Client Sample #:**	SV119-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/25/19	ZZ	
Styrene	ND	1	0.13	5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Toluene	**0.21 J**	1	0.17	5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*107*	*70-145*	
4-Bromofluorobenzene (SUR)	*118*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:40	**Site:**			
Sample #:	**421801-007**	**Client Sample #:**	SV118-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**1.7 J**	0.9	0.648	90	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.33 J**	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:40	**Site:**			
Sample #:	**421801-007**	**Client Sample #:**	SV118-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.18 J**	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*106*	*70-145*	
4-Bromofluorobenzene (SUR)	*117*	*70-145*	
Dibromofluoromethane (SUR)	*101*	*70-145*	
Toluene-d8 (SUR)	*102*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:00	**Site:**			
Sample #:	**421801-008**	**Client Sample #:**	SV118-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Benzene	**0.23 J**	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:00	**Site:**			
Sample #:	**421801-008**	**Client Sample #:**	SV118-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Toluene	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*121*	*70-145*	
4-Bromofluorobenzene (SUR)	*88*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:04	**Site:**			
Sample #:	**421801-009**	**Client Sample #:**	SV118-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**0.88 J**	0.7	0.504	70	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.53 J**	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:04	**Site:**			
Sample #:	**421801-009**	**Client Sample #:**	SV118-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.19 J**	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*121*	*70-145*	
4-Bromofluorobenzene (SUR)	*93*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:12	**Site:**			
Sample #:	**421801-010**	**Client Sample #:**	SV118-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209213	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.9	0.648	90	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Benzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:12	**Site:**			
Sample #:	**421801-010**	**Client Sample #:**	SV118-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*119*	*70-145*	
4-Bromofluorobenzene (SUR)	*91*	*70-145*	
Dibromofluoromethane (SUR)	*99*	*70-145*	
Toluene-d8 (SUR)	*103*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:55	**Site:**			
Sample #:	**421801-011**	**Client Sample #:**	SV121-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	1.1	0.264	5.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	1.1	0.165	5.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	1.1	0.319	5.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1.1	0.814	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	1.1	0.363	5.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	1.1	0.308	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	1.1	0.132	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	1.1	0.374	5.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	1.1	0.264	5.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**4.2 J**	1.1	0.792	110	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	1.1	0.297	5.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	1.1	55	110	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.31 J**	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	1.1	0.33	5.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1.1	0.462	5.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	1.1	0.462	5.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	1.1	0.418	5.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	**1.1 J**	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:55	**Site:**			
Sample #:	**421801-011**	**Client Sample #:**	SV121-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1.1	0.176	5.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	1.1	0.308	5.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	1.1	0.143	5.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	1.1	9.68	11	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	1.1	0.374	5.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.21 J**	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	1.1	0.418	5.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*116*	*70-145*	
4-Bromofluorobenzene (SUR)	*91*	*70-145*	
Dibromofluoromethane (SUR)	*101*	*70-145*	
Toluene-d8 (SUR)	*105*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:10	**Site:**			
Sample #:	**421801-012**	**Client Sample #:**	SV120-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**5.1 J**	0.9	0.648	90	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Acetone	**53 J**	0.9	45	90	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.40 J**	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:10	**Site:**			
Sample #:	**421801-012**	**Client Sample #:**	SV120-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.20 J**	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*108*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:12	**Site:**			
Sample #:	**421801-013**	**Client Sample #:**	SV120-5.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**4.6 J**	0.9	0.648	90	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Acetone	**56 J**	0.9	45	90	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.41 J**	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:12	**Site:**			
Sample #:	**421801-013**	**Client Sample #:**	SV120-5.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.18 J**	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:25	**Site:**			
Sample #:	**421801-014**	**Client Sample #:**	SV120-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.35 J**	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:25	**Site:**			
Sample #:	**421801-014**	**Client Sample #:**	SV120-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.15 J**	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*97*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:30	**Site:**			
Sample #:	**421801-015**	**Client Sample #:**	SV120-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.6	0.144	3	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.6	0.09	3	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.6	0.174	3	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.6	0.444	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.6	0.198	3	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.6	0.168	3	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.6	0.072	3	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.6	0.204	3	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.6	0.144	3	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.6	0.432	60	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.6	0.162	3	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.6	30	60	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
Benzene	**0.62 J**	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.6	0.18	3	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.6	0.252	3	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.6	0.252	3	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.6	0.228	3	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:30	**Site:**			
Sample #:	**421801-015**	**Client Sample #:**	SV120-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.6	0.096	3	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.6	0.168	3	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.6	0.078	3	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.6	5.28	6	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.6	0.204	3	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Toluene	**0.16 J**	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.6	0.228	3	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:40	**Site:**			
Sample #:	**421801-016**	**Client Sample #:**	SV120-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Benzene	**0.27 J**	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:40	**Site:**			
Sample #:	**421801-016**	**Client Sample #:**	SV120-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Toluene	**0.29 J**	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:05	**Site:**			
Sample #:	**421801-017**	**Client Sample #:**	B11-DDD-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 1311						QCBatchID:	QC1209951	
Arsenic	**190**	10	3.1	20	ug/L		12/18/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**54.6**	1	0.108	0.3	mg/Kg		12/04/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: STLC						QCBatchID:	QC1212551	
Arsenic	**1740**	100	13	200	ug/L		12/19/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:37	**Site:**			
Sample #:	**421801-018**	**Client Sample #:**	B20-BBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**43.9**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:41	**Site:**			
Sample #:	**421801-019**	**Client Sample #:**	B20-BBBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209681	
Arsenic	**29.8**	10	1.08	3	mg/Kg	12/07/19	12/09/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:57	**Site:**			
Sample #:	**421801-020**	**Client Sample #:**	SV121-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.49 J**	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:57	**Site:**			
Sample #:	**421801-020**	**Client Sample #:**	SV121-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Toluene	**0.18 J**	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:02	**Site:**			
Sample #:	**421801-021**	**Client Sample #:**	SV121-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.64 J**	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:02	**Site:**			
Sample #:	**421801-021**	**Client Sample #:**	SV121-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Toluene	**0.20 J**	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:07	**Site:**			
Sample #:	**421801-022**	**Client Sample #:**	SV121-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.9	0.648	90	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.19 J**	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	**4.2 J**	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:07	**Site:**			
Sample #:	**421801-022**	**Client Sample #:**	SV121-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Toluene	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:58	**Site:**			
Sample #:	**421801-023**	**Client Sample #:**	B12-BBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 1311						QCBatchID:	QC1209951	
Lead	**5090**	50	38	250	ug/L		12/19/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Lead	**1030**	10	1.28	5	mg/Kg		12/04/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: STLC						QCBatchID:	QC1212551	
Lead	**83000**	500	50	250	ug/L		12/19/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:01	**Site:**			
Sample #:	**421801-024**	**Client Sample #:**	B12-BBBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209681	
Lead	**118**	1	0.128	0.5	mg/Kg	12/07/19	12/11/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:24	**Site:**			
Sample #:	**421801-025**	**Client Sample #:**	SV119-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
Benzene	**0.92 J**	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:24	**Site:**			
Sample #:	**421801-025**	**Client Sample #:**	SV119-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Toluene	**0.33 J**	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*102*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:30	**Site:**			
Sample #:	**421801-026**	**Client Sample #:**	SV119-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.97 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:30	**Site:**			
Sample #:	**421801-026**	**Client Sample #:**	SV119-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.33 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*106*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:00	**Site:**			
Sample #:	**421801-027**	**Client Sample #:**	SV119-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	**2.1 J**	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.63 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:00	**Site:**			
Sample #:	**421801-027**	**Client Sample #:**	SV119-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.38 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:42	**Site:**			
Sample #:	**421801-028**	**Client Sample #:**	SV122-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.49 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:42	**Site:**			
Sample #:	**421801-028**	**Client Sample #:**	SV122-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.28 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*118*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:45	**Site:**			
Sample #:	**421801-029**	**Client Sample #:**	SV122-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.45 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:45	**Site:**			
Sample #:	**421801-029**	**Client Sample #:**	SV122-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.20 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:50	**Site:**			
Sample #:	**421801-030**	**Client Sample #:**	SV122-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	**1.6 J**	1	0.72	100	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Acetone	ND	1	50	100	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Benzene	**0.97 J**	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/27/19	LZ	
Methylene chloride	**0.40 J**	1	0.21	5	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:50	**Site:**			
Sample #:	**421801-030**	**Client Sample #:**	SV122-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
Styrene	ND	1	0.13	5	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Toluene	**0.26 J**	1	0.17	5	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*111*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:55	**Site:**			
Sample #:	**421801-031**	**Client Sample #:**	SV122-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:55	**Site:**			
Sample #:	**421801-031**	**Client Sample #:**	SV122-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:57	**Site:**			
Sample #:	**421801-032**	**Client Sample #:**	SV122-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	1	0.72	100	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Acetone	ND	1	50	100	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Benzene	**0.36 J**	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/27/19	LZ	
Methylene chloride	**2.1 J**	1	0.21	5	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:57	**Site:**			
Sample #:	**421801-032**	**Client Sample #:**	SV122-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
Styrene	ND	1	0.13	5	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Toluene	**0.38 J**	1	0.17	5	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*110*	*70-145*	
Dibromofluoromethane (SUR)	*102*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:00	**Site:**			
Sample #:	**421801-033**	**Client Sample #:**	B12-BBB-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Lead	**32.0**	1	0.128	0.5	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:39	**Site:**			
Sample #:	**421801-034**	**Client Sample #:**	B20-BBB-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**56.9**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:30	**Site:**			
Sample #:	**421801-035**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3010A							QCBatchID: QC1209268		
Arsenic	ND	1	0.008	0.01	mg/L		11/27/19	KLN	
Lead	ND	1	0.005	0.01	mg/L		11/27/19	KLN	
Method: EPA 8260B *NELAC* Prep Method: EPA 5030B							QCBatchID: QC1209237		
1,1,1,2-Tetrachloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,1-Trichloroethane	ND	1	0.38	5	ug/L		11/26/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,2-Trichloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.29	5	ug/L		11/26/19	LZ	
1,1-Dichloroethane	ND	1	0.32	5	ug/L		11/26/19	LZ	
1,1-Dichloroethene	ND	1	0.3	5	ug/L		11/26/19	LZ	
1,1-Dichloropropene	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.28	5	ug/L		11/26/19	LZ	
1,2,3-Trichloropropane	ND	1	0.16	5	ug/L		11/26/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.27	5	ug/L		11/26/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/L		11/26/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.12	5	ug/L		11/26/19	LZ	
1,2-Dibromoethane	ND	1	0.19	5	ug/L		11/26/19	LZ	
1,2-Dichlorobenzene	ND	1	0.26	5	ug/L		11/26/19	LZ	
1,2-Dichloroethane	ND	1	0.2	5	ug/L		11/26/19	LZ	
1,2-Dichloropropane	ND	1	0.36	5	ug/L		11/26/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.24	5	ug/L		11/26/19	LZ	
1,3-Dichlorobenzene	ND	1	0.34	5	ug/L		11/26/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/L		11/26/19	LZ	
1,4-Dichlorobenzene	ND	1	0.43	5	ug/L		11/26/19	LZ	
2,2-Dichloropropane	ND	1	0.32	5	ug/L		11/26/19	LZ	
2-Butanone (MEK)	ND	1	0.78	100	ug/L		11/26/19	LZ	
2-Chlorotoluene	ND	1	0.33	5	ug/L		11/26/19	LZ	
4-Chlorotoluene	ND	1	0.31	5	ug/L		11/26/19	LZ	
4-Isopropyltoluene	ND	1	0.32	5	ug/L		11/26/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.12	5	ug/L		11/26/19	LZ	
Acetone	ND	1	50	100	ug/L		11/26/19	LZ	
Allyl Chloride	ND	1	0.19	5	ug/L		11/26/19	LZ	
Benzene	ND	1	0.18	1	ug/L		11/26/19	LZ	
Bromobenzene	ND	1	0.53	5	ug/L		11/26/19	LZ	
Bromochloromethane	ND	1	0.17	5	ug/L		11/26/19	LZ	
Bromodichloromethane	ND	1	0.31	5	ug/L		11/26/19	LZ	
Bromoform	ND	1	0.13	5	ug/L		11/26/19	LZ	
Bromomethane	ND	1	0.68	5	ug/L		11/26/19	LZ	
Carbon Tetrachloride	ND	1	0.27	5	ug/L		11/26/19	LZ	
Chlorobenzene	ND	1	0.19	5	ug/L		11/26/19	LZ	
Chlorodibromomethane	ND	1	0.21	5	ug/L		11/26/19	LZ	
Chloroethane	ND	1	0.45	5	ug/L		11/26/19	LZ	
Chloroform	ND	1	0.18	5	ug/L		11/26/19	LZ	
Chloromethane	ND	1	0.27	5	ug/L		11/26/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.27	5	ug/L		11/26/19	LZ	
cis-1,3-dichloropropene	ND	1	0.25	5	ug/L		11/26/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		11/26/19	LZ	
Dibromomethane	ND	1	0.23	5	ug/L		11/26/19	LZ	
Dichlorodifluoromethane	ND	1	0.33	5	ug/L		11/26/19	LZ	
Ethylbenzene	ND	1	0.21	5	ug/L		11/26/19	LZ	
Hexachlorobutadiene	ND	1	0.51	5	ug/L		11/26/19	LZ	
Isopropylbenzene	ND	1	0.24	5	ug/L		11/26/19	LZ	
m and p-Xylene	ND	1	0.45	5	ug/L		11/26/19	LZ	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:30	**Site:**			
Sample #:	**421801-035**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Methylene chloride	ND	1	0.16	5	ug/L		11/26/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L		11/26/19	LZ	
Naphthalene	ND	1	0.25	5	ug/L		11/26/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/L		11/26/19	LZ	
N-propylbenzene	ND	1	0.31	5	ug/L		11/26/19	LZ	
o-Xylene	ND	1	0.29	5	ug/L		11/26/19	LZ	
Sec-butylbenzene	ND	1	0.32	5	ug/L		11/26/19	LZ	
Styrene	ND	1	0.22	5	ug/L		11/26/19	LZ	
Tert-butylbenzene	ND	1	0.4	5	ug/L		11/26/19	LZ	
Tetrachloroethene	ND	1	0.18	5	ug/L		11/26/19	LZ	
Toluene	ND	1	0.24	5	ug/L		11/26/19	LZ	
trans-1,2-dichloroethene	ND	1	0.33	5	ug/L		11/26/19	LZ	
trans-1,3-dichloropropene	ND	1	0.23	5	ug/L		11/26/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		11/26/19	LZ	
Trichloroethene	ND	1	0.39	5	ug/L		11/26/19	LZ	
Trichlorofluoromethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
Vinyl Chloride	ND	1	0.18	5	ug/L		11/26/19	LZ	
Xylenes (Total)	ND	1	0.45	5	ug/L		11/26/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*102*	*70-145*	
4-Bromofluorobenzene (SUR)	*118*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

QCBatchID: QC1209213	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209213MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	

QCBatchID: QC1209213	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209213MB1					
Methylene chloride	**1.9 J**	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209213LCS1, QC1209213LCSD1											
1,1-Dichloroethene	50	50	59	56	ug/Kg	118	112	5	59-172	22	
Benzene	50	50	49	46	ug/Kg	98	92	6	62-137	24	
Chlorobenzene	50	50	46	44	ug/Kg	92	88	4	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	41	40	ug/Kg	82	80	2	62-137	21	
Toluene	50	50	51	47	ug/Kg	102	94	8	59-139	21	
Trichloroethene	50	50	53	47	ug/Kg	106	94	12	66-142	21	

QCBatchID: QC1209223	Analyst: sandyw	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209223MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	

QCBatchID: QC1209223	Analyst: sandyw	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209223MB1					
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209223LCS1											
1,1-Dichloroethene	50		55		ug/Kg	110			59-172		
Benzene	50		49		ug/Kg	98			62-137		
Chlorobenzene	50		52		ug/Kg	104			60-133		
Methyl-t-butyl Ether (MTBE)	50		43		ug/Kg	86			62-137		
Toluene	50		51		ug/Kg	102			59-139		
Trichloroethene	50		58		ug/Kg	116			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209223MS1, QC1209223MSD1												**Source: 421780-006**
1,1-Dichloroethene	ND	50	50	55	53	ug/Kg	110	106	3.7	59-172	22	
Benzene	ND	50	50	50	48	ug/Kg	100	96	4.1	62-137	24	
Chlorobenzene	ND	50	50	48	47	ug/Kg	96	94	2.1	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	44	45	ug/Kg	88	90	2.2	62-137	21	
Toluene	ND	50	50	47	46	ug/Kg	94	92	2.2	59-139	21	
Trichloroethene	ND	50	50	52	49	ug/Kg	104	98	5.9	66-142	21	

QCBatchID: QC1209237	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209237MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,1-Trichloroethane	ND	ug/L	0.38	5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,2-Trichloroethane	ND	ug/L	0.25	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.29	5	
1,1-Dichloroethane	ND	ug/L	0.32	5	
1,1-Dichloroethene	ND	ug/L	0.3	5	
1,1-Dichloropropene	ND	ug/L	0.25	5	
1,2,3-Trichlorobenzene	ND	ug/L	0.28	5	
1,2,3-Trichloropropane	ND	ug/L	0.16	5	
1,2,4-Trichlorobenzene	ND	ug/L	0.27	5	
1,2,4-Trimethylbenzene	ND	ug/L	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.12	5	
1,2-Dibromoethane	ND	ug/L	0.19	5	
1,2-Dichlorobenzene	ND	ug/L	0.26	5	
1,2-Dichloroethane	ND	ug/L	0.2	5	
1,2-Dichloropropane	ND	ug/L	0.36	5	
1,3,5-Trimethylbenzene	ND	ug/L	0.24	5	
1,3-Dichlorobenzene	ND	ug/L	0.34	5	
1,3-Dichloropropane	ND	ug/L	0.19	5	
1,4-Dichlorobenzene	ND	ug/L	0.43	5	
2,2-Dichloropropane	ND	ug/L	0.32	5	
2-Butanone (MEK)	ND	ug/L	0.78	100	
2-Chlorotoluene	ND	ug/L	0.33	5	
4-Chlorotoluene	ND	ug/L	0.31	5	
4-Isopropyltoluene	ND	ug/L	0.32	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.12	5	
Acetone	ND	ug/L	50	100	
Allyl Chloride	ND	ug/L	0.19	5	
Benzene	ND	ug/L	0.18	1	
Bromobenzene	ND	ug/L	0.53	5	
Bromochloromethane	ND	ug/L	0.17	5	
Bromodichloromethane	ND	ug/L	0.31	5	
Bromoform	ND	ug/L	0.13	5	
Bromomethane	ND	ug/L	0.68	5	
Carbon Tetrachloride	ND	ug/L	0.27	5	
Chlorobenzene	ND	ug/L	0.19	5	
Chlorodibromomethane	ND	ug/L	0.21	5	
Chloroethane	ND	ug/L	0.45	5	
Chloroform	ND	ug/L	0.18	5	
Chloromethane	ND	ug/L	0.27	5	
cis-1,2-Dichloroethene	ND	ug/L	0.27	5	
cis-1,3-dichloropropene	ND	ug/L	0.25	5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Dibromomethane	ND	ug/L	0.23	5	
Dichlorodifluoromethane	ND	ug/L	0.33	5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	1	
Ethylbenzene	ND	ug/L	0.21	5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.23	1	
Hexachlorobutadiene	ND	ug/L	0.51	5	
Isopropylbenzene	ND	ug/L	0.24	5	
m and p-Xylene	ND	ug/L	0.45	5	

QCBatchID: QC1209237	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209237MB1					
Methylene chloride	**0.70 J**	ug/L	0.16	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.19	1	
Naphthalene	ND	ug/L	0.25	5	
N-butylbenzene	ND	ug/L	0.25	5	
N-propylbenzene	ND	ug/L	0.31	5	
o-Xylene	ND	ug/L	0.29	5	
Sec-butylbenzene	ND	ug/L	0.32	5	
Styrene	ND	ug/L	0.22	5	
t-Butyl alcohol (TBA)	ND	ug/L	5.2	10	
Tert-amylmethylether (TAME)	ND	ug/L	0.19	5	
Tert-butylbenzene	ND	ug/L	0.4	5	
Tetrachloroethene	ND	ug/L	0.8	5	
Toluene	ND	ug/L	0.24	5	
trans-1,2-dichloroethene	ND	ug/L	0.33	5	
trans-1,3-dichloropropene	ND	ug/L	0.23	5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Trichloroethene	ND	ug/L	0.39	5	
Trichlorofluoromethane	ND	ug/L	0.25	5	
Vinyl Chloride	ND	ug/L	0.18	5	
Xylenes (Total)	ND	ug/L	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209237LCS1											
1,1-Dichloroethene	50		56		ug/L	112			59-172		
Benzene	50		49		ug/L	98			62-137		
Chlorobenzene	50		51		ug/L	102			60-133		
Methyl-t-butyl Ether (MTBE)	50		43		ug/L	86			62-137		
Toluene	50		49		ug/L	98			59-139		
Trichloroethene	50		54		ug/L	108			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209237MS1, QC1209237MSD1												**Source: 421782-006**
1,1-Dichloroethene	4.8	50	50	60	55	ug/L	110	100	8.7	59-172	22	
Benzene	1.1	50	50	52	49	ug/L	102	96	5.9	62-137	24	
Chlorobenzene	ND	50	50	52	50	ug/L	104	100	3.9	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	48	48	ug/L	96	96	0.0	62-137	21	
Toluene	ND	50	50	49	48	ug/L	98	96	2.1	59-139	21	
Trichloroethene	2800	50	50	2500	2300	ug/L	0	0	8.3	66-142	21	NC

QCBatchID: QC1209240	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209240MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	

QCBatchID: QC1209240	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209240MB1					
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209240LCS1											
1,1-Dichloroethene	50		61		ug/Kg	122			59-172		
Benzene	50		49		ug/Kg	98			62-137		
Chlorobenzene	50		47		ug/Kg	94			60-133		
Methyl-t-butyl Ether (MTBE)	50		34		ug/Kg	68			62-137		
Toluene	50		53		ug/Kg	106			59-139		
Trichloroethene	50		54		ug/Kg	108			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209240MS1, QC1209240MSD1												**Source: 421798-004**
1,1-Dichloroethene	ND	50	50	56	53	ug/Kg	112	106	5.5	59-172	22	
Benzene	ND	50	50	48	47	ug/Kg	96	94	2.1	62-137	24	
Chlorobenzene	ND	50	50	44	42	ug/Kg	88	84	4.7	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	44	44	ug/Kg	88	88	0.0	62-137	21	
Toluene	ND	50	50	47	46	ug/Kg	94	92	2.2	59-139	21	
Trichloroethene	ND	50	50	47	46	ug/Kg	94	92	2.2	66-142	21	

QCBatchID:	**QC1209246**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	11/26/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209246MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209246LCS1											
Arsenic	50		45.0		mg/Kg	90			80-120		
Lead	50		46.6		mg/Kg	93			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209246MS1, QC1209246MSD1												**Source: 421785-001**
Arsenic	4.81	50	50	39.4	42.0	mg/Kg	69	74	6.4	75-125	20	M
Lead	4.81	50	50	42.1	45.6	mg/Kg	75	82	8.0	75-125	20	M

QCBatchID: QC1209262	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209262MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209262	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209262MB1					
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209262LCS1, QC1209262LCSD1											
1,1-Dichloroethene	50	50	58	58	ug/Kg	116	116	0	59-172	22	
Benzene	50	50	51	52	ug/Kg	102	104	2	62-137	24	
Chlorobenzene	50	50	52	53	ug/Kg	104	106	2	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	43	44	ug/Kg	86	88	2	62-137	21	
Toluene	50	50	51	53	ug/Kg	102	106	4	59-139	21	
Trichloroethene	50	50	58	59	ug/Kg	116	118	2	66-142	21	

QCBatchID: QC1209268	Analyst: rvenegas	Method: EPA 6010B
Matrix: Water	Analyzed: 11/26/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209268MB1					
Antimony	**0.044**	mg/L	0.014	0.04	B
Arsenic	ND	mg/L	0.008	0.01	
Barium	ND	mg/L	0.002	0.01	
Beryllium	ND	mg/L	0.001	0.005	
Cadmium	ND	mg/L	0.002	0.005	
Chromium	ND	mg/L	0.002	0.01	
Cobalt	ND	mg/L	0.002	0.005	
Copper	ND	mg/L	0.001	0.01	
Lead	ND	mg/L	0.005	0.01	
Molybdenum	ND	mg/L	0.005	0.01	
Nickel	ND	mg/L	0.003	0.02	
Selenium	**0.029 J**	mg/L	0.016	0.03	
Silver	ND	mg/L	0.003	0.005	
Thallium	ND	mg/L	0.009	0.05	
Tin	ND	mg/L	0.008	0.05	
Titanium	ND	mg/L	0.002	0.01	
Vanadium	ND	mg/L	0.002	0.005	
Zinc	ND	mg/L	0.017	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268LCS1											
Antimony	2		2.02		mg/L	101			80-120		
Arsenic	2		2.02		mg/L	101			80-120		
Barium	2		2.10		mg/L	105			80-120		
Beryllium	2		2.10		mg/L	105			80-120		
Cadmium	2		2.17		mg/L	109			80-120		
Chromium	2		2.10		mg/L	105			80-120		
Cobalt	2		2.13		mg/L	107			80-120		
Copper	2		2.07		mg/L	104			80-120		
Lead	2		2.07		mg/L	104			80-120		
Molybdenum	2		2.05		mg/L	103			80-120		
Nickel	2		2.16		mg/L	108			80-120		
Selenium	2		2.00		mg/L	100			80-120		
Silver	2		2.08		mg/L	104			80-120		
Thallium	2		2.08		mg/L	104			80-120		
Vanadium	2		2.20		mg/L	110			80-120		
Zinc	2		2.30		mg/L	115			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268MS1, QC1209268MSD1												**Source: 421801-035**
Antimony	0.036	1	1	1.04	1.03	mg/L	100	99	1.0	75-125	20	
Arsenic	ND	1	1	1.03	0.998	mg/L	103	100	3.2	75-125	20	
Barium	ND	1	1	1.07	1.06	mg/L	107	106	0.9	75-125	20	
Beryllium	ND	1	1	0.955	1.000	mg/L	96	100	4.6	75-125	20	
Cadmium	ND	1	1	1.10	1.09	mg/L	110	109	0.9	75-125	20	
Chromium	ND	1	1	1.07	1.06	mg/L	107	106	0.9	75-125	20	
Cobalt	ND	1	1	1.10	1.09	mg/L	110	109	0.9	75-125	20	
Copper	ND	1	1	0.952	1.00	mg/L	95	100	4.9	75-125	20	

QCBatchID: QC1209268	Analyst: rvenegas	Method: EPA 6010B
Matrix: Water	Analyzed: 11/26/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268MS1, QC1209268MSD1												**Source: 421801-035**
Lead	ND	1	1	1.08	1.06	mg/L	108	106	1.9	75-125	20	
Molybdenum	ND	1	1	1.05	1.04	mg/L	105	104	1.0	75-125	20	
Nickel	ND	1	1	1.11	1.10	mg/L	111	110	0.9	75-125	20	
Selenium	0.038	1	1	1.03	1.03	mg/L	99	99	0.0	75-125	20	
Silver	ND	1	1	0.978	1.02	mg/L	98	102	4.2	75-125	20	
Thallium	ND	1	1	1.08	1.06	mg/L	108	106	1.9	75-125	20	
Vanadium	0.004	1	1	1.03	1.08	mg/L	103	108	4.7	75-125	20	
Zinc	ND	1	1	1.17	1.15	mg/L	117	115	1.7	75-125	20	

QCBatchID: QC1209345	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/27/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209345MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209345	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/27/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209345MB1					
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209345LCS1, QC1209345LCSD1											
1,1-Dichloroethene	50	50	63	62	ug/Kg	126	124	2	59-172	22	
Benzene	50	50	55	55	ug/Kg	110	110	0	62-137	24	
Chlorobenzene	50	50	55	55	ug/Kg	110	110	0	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	47	46	ug/Kg	94	92	2	62-137	21	
Toluene	50	50	55	54	ug/Kg	110	108	2	59-139	21	
Trichloroethene	50	50	58	57	ug/Kg	116	114	2	66-142	21	

QCBatchID:	**QC1209681**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	12/07/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209681MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1209681LCS1											
Arsenic	50		47.1		mg/Kg	94			80-120		
Lead	50		47.6		mg/Kg	95			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1209681MS1, QC1209681MSD1												**Source: 421801-019**
Arsenic	29.8	50	50	75.0	73.2	mg/Kg	90	87	2.4	75-125	20	
Lead	112	50	50	171	171	mg/Kg	118	118	0.0	75-125	20	

QCBatchID:	**QC1209951**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	12/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209951MB1					
Arsenic	ND	ug/L	0.31	2	
Lead	ND	ug/L	0.76	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209951LCS1											
Arsenic	50		51.7		ug/L	103			80-120		
Lead	50		53.6		ug/L	107			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209951MS1, QC1209951MSD1												**Source: 421801-017**
Arsenic	190	50	50	242	241	ug/L	104	102	0.4	80-120		
Lead	ND	50	50	53.1	52.9	ug/L	106	106	0.4	80-120		

QCBatchID:	**QC1212551**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	12/14/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1212551MB1					
Arsenic	ND	ug/L	0.13	2	
Lead	**11.8**	ug/L	0.1	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1212551LCS1, QC1212551LCSD1											
Arsenic	500	500	529	521	ug/L	106	104	2	80-120	20	
Lead	500	500	440	432	ug/L	88	86	2	80-120	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

Patty Mata

From: Clare Steedman <clare.steedman@terraphase.com> on behalf of Clare Steedman
Sent: Tuesday, December 10, 2019 6:28 PM
To: Patty Mata
Subject: RE: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Yes please, run the STLC/TCLP on the sample that had the 1,030 mg/kg lead result, 421801-23.
Clare

From: Patty Mata <patty.mata@enthalpy.com>
Sent: Tuesday, December 10, 2019 4:54 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Clare,

Sample number 421801-23 has only 3 B's in the sample ID. This is the sample that needs STLC and TCLP, correct? It had total Lead result of 1030 mg/kg. The sample ID with 4 B's is my number -24 and you had just requested Total Lead for that sample last week.

In observance of Christmas and New Year, Enthalpy Analytical will be closed on Tuesday December 24th at 2PM through Thursday December 26th and Wednesday January 1st. Normal operation will resume on Friday December 27th through December 31st and on Thursday January 2nd. During this period, samples with holding time less than 48 hours will only be accepted if they were pre-arranged with the project managers. Please be advised that holiday surcharges might apply.

With Regards,

Patty Mata
Project Manager
Direct (714) 771-9930

ENTHALPY ANALYTICAL

From: Clare Steedman <clare.steedman@terraphase.com>
Sent: Tuesday, December 10, 2019 3:44 PM
To: Patty Mata <patty.mata@enthalpy.com>
Subject: RE: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Patty,

Would you please run the following analyses on regular turn? Thanks!

421801-023, B12-BBBB-0.5: STLC and TCLP leaching, then 6020 for lead
412801-017, B11-DDD-1.5: STLC and TCLP leaching, then 6020 for arsenic

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Patty Mata <patty.mata@enthalpy.com>
Sent: Thursday, December 05, 2019 12:24 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Cc: Luke Russell <luke.russell@terraphase.com>; Dan Phelps <dan.phelps@terraphase.com>; Tanner Rickard <tanner.rickard@terraphase.com>
Subject: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Clare Steedman,

Attached is your revised final report #421801. We corrected the metal for sample B20-BBB-0.5-DUP in this report. Sorry again for the error!

Thank you.

In accordance with our paperless initiative, we are no longer mailing or faxing reports by default. If you require a hard copy, please inform your Project Manager.

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

With Regards,

Patty Mata
Project Manager

931 W. Barkley Ave., Orange, CA 92868
O: 714.771.6900
D: 714.771.9930
Patty.mata@enthalpy.com

To help protect the air we breathe, the water we drink, and the soil that feeds us.

Please take a moment to provide customer feedback.

Patty Mata

From: Clare Steedman <clare.steedman@terraphase.com> on behalf of Clare Steedman
Sent: Thursday, December 05, 2019 11:19 AM
To: Patty Mata
Subject: RE: Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Thank you Patty.

Please run the following held analyses:

- 421801-019, B20-BBBB-0.5, for arsenic by 6020
- 421801-024, B12-BBBB-0.5 for lead by 6020

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Patty Mata <patty.mata@enthalpy.com>
Sent: Wednesday, December 04, 2019 7:56 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Cc: Luke Russell <luke.russell@terraphase.com>; Dan Phelps <dan.phelps@terraphase.com>; Tanner Rickard <tanner.rickard@terraphase.com>
Subject: Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Clare Steedman,

Attached is your final report #421801.

Thank you.

In accordance with our paperless initiative, we are no longer mailing or faxing reports by default. If you require a hard copy, please inform your Project Manager.

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

With Regards,

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: 92180	Standard: X · 4 Day: · 3 Day:
	Page: 1 of 4	2 Day: · 1 Day: · Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

ENTHALPY ANALYTICAL

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	—
Address:	18401 Von Karman Ave, Ste410	Address:	2295 Robertson Blvd.
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	—
Fax:	—	Sampled By:	Tanner / Wes

Analysis Request: VOCs (8260)

Test Instructions / Comments: EsDat Format

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)
1	SV117-5.0	11/23/19	0835	S	3 voa	1,6	X
2	SV117-10.0		0845				X
3	SV117-15.0		0900				X
4	SV117-15.0-DUP		0902				X
5	SV117-25.0		0905				X
6	SV119-5.0		0930				X
7	SV118-5.0		0940				X
8	SV118-10.0		1000				X
9	SV118-15.0		1004				X
10	SV118-25.0	11/23/19	1012	S	3Voa	1,6	X

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	KAD TRAN	E.A	11/25/19 1420
2 Relinquished By:	[signature]	KAD TRAN	E.A	11/25/19 1543
2 Received By:	[signature]	[signature]	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 2 of 4	Standard: X 4 Day: 3 Day: 2 Day: 1 Day: Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	--
Address:	18401 Von Karman Ave. Ste 410	Address:	2295 Robertson Blvd
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	-
Fax:	-	Sampled By:	Tanner/Wes

Analysis Request: VOCs (8260); As 6020; ~~Pb 6020~~; HOLD

Test Instructions / Comments: Es Dat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)	As 6020	~~Pb 6020~~	HOLD						
1	SV121 - 5.0	11/23/19	1056	S	3 Voa	1.6	X									
2	SV120 - 5.0	↓	1110	↓	↓	↓	X									
3	SV120 - 5.0 - DUP		1112				X									
4	SV120 - 10.0		1125				X									
5	SV120 - 15.0		1130				X									
6	SV120 - 25.0		1140		3 Voa	1.6	X									
7	B11 - DDD - 1.5		1105		1x Jar	Ice		X								
8	B20 - BBB - 0.5	↓	1137		1x Jar	↓		X								
9	B20 - BBBB - 0.5		1141	↓	1 JAR	Ice		~~X~~	do	X						
10	SV121 - 10.0	11/23/19	1257	S	3 Voa	1.6	X									

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	[illegible]	E.A	11/25/19 1420
2 Relinquished By:	[signature]	[illegible]	E.A	11/25/19 1543
2 Received By:	[signature]	G Kim	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave, Orange, CA 92868	Lab No:	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 3 of 4	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - Orange	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
P.O. Box 741137, Los Angeles, CA 90074-1137							

ENTHALPY ANALYTICAL

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton MS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	-
Address:	18401 Von Karman Ave, Ste 410	Address:	2295 Robertson Blvd
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	-
Fax:	-	Sampled By:	Tanner / Wes

Analysis Request

Test Instructions / Comments: Es Dat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)	Pb (6020)	HOLD								
1	SV121-15.0	11/23/19	1302	S	3 Voa's	1,6	X										
2	SV121-25.0	↓	1307	↓	3 Voas	1,6	X										
3	B12-BBB-0.5	↓	1158	↓	1x Jar	Ice		X									
4	B12-BBBB-0.5	↓	1201	↓	1x Jar	Ice			X								
5	SV119-10.0	↓	1324	↓	3 Voa's	1,6	X										
6	SV119-15.0	↓	1330	↓	↓	↓	X										
7	SV119-25.0	↓	1400	↓	↓	↓	X										
8	SV122-5.0	↓	1342	↓	↓	↓	X										
9	SV122-10.0	↓	1345	↓	↓	↓	X										
10	SV122-15.0	11/23/19	1350	S	3 Voas	1,6	X										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	KAO TRAN	E-A	11/25/19 1420
2 Relinquished By:	[signature]	KAO TRAN	E-A	11/25/19 1543
2 Received By:	[signature]	[signature]	EA	11/28/19 1843
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 4 of 4	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton MS
Report To:	Clare Steedman	Number:	5030-008.003
Email:	clare.steedman@terraphase.com	P.O. #:	—
Address:	18401 Von Karman Ave Ste 410	Address:	2295 Robertson Blvd.
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	—
Fax:	—	Sampled By:	Tanner Weiz

Analysis Request: VOC 8260; Pb 6020; As 6020; Pb + As 6010

Test Instructions / Comments: EsDat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOC 8260	Pb 6020	As 6020	Pb + As 6010						
1	SV122 - 25.0	11/23/19	1355	S	3 VOA	1,5	X									
2	SV122 - 25.0 - DUP		1357		↓	1,6	X									
3	B12 - BBB - 0.5 - DUP		1200		1 JAR	Ice		X								
4	B20 - BBB - 0.5 - DUP		1139		1 JAR	Ice			X							
5	BB - 01	11/23/19	1430	W	500 mL, 3 VOA	3,2	X			X						
6																
7																
8																
9																
10																

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	[illegible]	E-A	11/25/19 1420
2 Relinquished By:	[signature]	[illegible]	E-A	11/25/19 1543
2 Received By:	[signature]	G. Kim	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Project: Hamilton HS

Date Received: 11/25/19 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 3.8 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.2 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?		✓	
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 11/25/19

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	Terraphase Engineering	Lab Request:	421801
Address:	18401 Von Karman Ave, Suite #410 Irvine, CA 92612	Report Date:	02/04/2020
		Date Received:	11/25/2019
		Client ID:	15743
Attn:	Clare Steedman		

Comments: Hamilton HS, #S030.008.003, 2295 Robertson Blvd, Los Angeles, CA
Revised report to include additional metals test results requested on 12/11/19, and to include following note.
The base MDL/RL limits do not include the 100x dilution for the EPA 6020 STLC Method Blank in batch QC1212551 due to software limitation. The STLC Method Blank limits are actually 10 ug/L and 50 ug/L, which would make the 11.8 ug/L Method Blank detection a "J" flagged estimated value.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID
421801-001	SV117-5.0	421801-025	SV119-10.0
421801-002	SV117-10.0	421801-026	SV119-15.0
421801-003	SV117-15.0	421801-027	SV119-25.0
421801-004	SV117-15.0-DUP	421801-028	SV122-5.0
421801-005	SV117-25.0	421801-029	SV122-10.0
421801-006	SV119-5.0	421801-030	SV122-15.0
421801-007	SV118-5.0	421801-031	SV122-25.0
421801-008	SV118-10.0	421801-032	SV122-25.0-DUP
421801-009	SV118-15.0	421801-033	B12-BBB-0.5-DUP
421801-010	SV118-25.0	421801-034	B20-BBB-0.5-DUP
421801-011	SV121-5.0	421801-035	EB-01
421801-012	SV120-5.0		
421801-013	SV120-5.0-DUP		
421801-014	SV120-10.0		
421801-015	SV120-15.0		
421801-016	SV120-25.0		
421801-017	B11-DDD-1.5		
421801-018	B20-BBB-0.5		
421801-019	B20-BBBB-0.5		
421801-020	SV121-10.0		
421801-021	SV121-15.0		
421801-022	SV121-25.0		
421801-023	B12-BBB-0.5		
421801-024	B12-BBBB-0.5		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Patricia Mata, PM

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:35	**Site:**			
Sample #:	**421801-001**	**Client Sample #:**	SV117-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	**0.32 J**	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**2.2 J**	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.30 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:35	**Site:**			
Sample #:	**421801-001**	**Client Sample #:**	SV117-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*109*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:45	**Site:**			
Sample #:	**421801-002**	**Client Sample #:**	SV117-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**0.86 J**	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**1.1 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	**2.3 J**	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 08:45	**Site:**			
Sample #:	**421801-002**	**Client Sample #:**	SV117-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.40 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*108*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:00	**Site:**			
Sample #:	**421801-003**	**Client Sample #:**	SV117-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.47 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:00	**Site:**			
Sample #:	**421801-003**	**Client Sample #:**	SV117-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.14 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*106*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:02	**Site:**			
Sample #:	**421801-004**	**Client Sample #:**	SV117-15.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.40 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:02	**Site:**			
Sample #:	**421801-004**	**Client Sample #:**	SV117-15.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.13 J**	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*108*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:05	**Site:**			
Sample #:	**421801-005**	**Client Sample #:**	SV117-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.15 J**	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:05	**Site:**			
Sample #:	**421801-005**	**Client Sample #:**	SV117-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.7	0.119	3.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*113*	*70-145*	
4-Bromofluorobenzene (SUR)	*117*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:30	**Site:**			
Sample #:	**421801-006**	**Client Sample #:**	SV119-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**4.5 J**	1	0.72	100	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	
Acetone	**87 J**	1	50	100	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
Benzene	**0.44 J**	1	0.18	5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	1	0.21	5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:30	**Site:**			
Sample #:	**421801-006**	**Client Sample #:**	SV119-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/25/19	ZZ	
Styrene	ND	1	0.13	5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Toluene	**0.21 J**	1	0.17	5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*107*	*70-145*	
4-Bromofluorobenzene (SUR)	*118*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:40	**Site:**			
Sample #:	**421801-007**	**Client Sample #:**	SV118-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209223	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	**1.7 J**	0.9	0.648	90	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Benzene	**0.33 J**	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 09:40	**Site:**			
Sample #:	**421801-007**	**Client Sample #:**	SV118-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Toluene	**0.18 J**	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*106*	*70-145*	
4-Bromofluorobenzene (SUR)	*117*	*70-145*	
Dibromofluoromethane (SUR)	*101*	*70-145*	
Toluene-d8 (SUR)	*102*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:00	**Site:**			
Sample #:	**421801-008**	**Client Sample #:**	SV118-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Benzene	**0.23 J**	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:00	**Site:**			
Sample #:	**421801-008**	**Client Sample #:**	SV118-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Toluene	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*121*	*70-145*	
4-Bromofluorobenzene (SUR)	*88*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:04	**Site:**			
Sample #:	**421801-009**	**Client Sample #:**	SV118-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**0.88 J**	0.7	0.504	70	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.53 J**	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:04	**Site:**			
Sample #:	**421801-009**	**Client Sample #:**	SV118-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.19 J**	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*121*	*70-145*	
4-Bromofluorobenzene (SUR)	*93*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:12	**Site:**			
Sample #:	**421801-010**	**Client Sample #:**	SV118-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209213	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/25/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/25/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/25/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
2-Butanone (MEK)	ND	0.9	0.648	90	ug/Kg		11/25/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/25/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/25/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Benzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/25/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/25/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/25/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:12	**Site:**			
Sample #:	**421801-010**	**Client Sample #:**	SV118-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/25/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/25/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/25/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/25/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/25/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/25/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/25/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Toluene	ND	0.9	0.153	4.5	ug/Kg		11/25/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/25/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/25/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/25/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/25/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/25/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/25/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*119*	*70-145*	
4-Bromofluorobenzene (SUR)	*91*	*70-145*	
Dibromofluoromethane (SUR)	*99*	*70-145*	
Toluene-d8 (SUR)	*103*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:55	**Site:**			
Sample #:	**421801-011**	**Client Sample #:**	SV121-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209240	
1,1,1,2-Tetrachloroethane	ND	1.1	0.264	5.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	1.1	0.165	5.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	1.1	0.319	5.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1.1	0.814	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	1.1	0.363	5.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	1.1	0.308	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	1.1	0.132	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	1.1	0.374	5.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	1.1	0.264	5.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**4.2 J**	1.1	0.792	110	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	1.1	0.297	5.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	1.1	55	110	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.31 J**	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	1.1	0.33	5.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1.1	0.462	5.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	1.1	0.462	5.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	1.1	0.418	5.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	**1.1 J**	1.1	0.231	5.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 10:55	**Site:**			
Sample #:	**421801-011**	**Client Sample #:**	SV121-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1.1	0.176	5.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	1.1	0.275	5.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	1.1	0.242	5.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	1.1	0.308	5.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	1.1	0.143	5.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	1.1	9.68	11	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	1.1	0.374	5.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.21 J**	1.1	0.187	5.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	1.1	0.209	5.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	1.1	0.198	5.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1.1	0.22	5.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	1.1	0.253	5.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	1.1	0.154	5.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	1.1	0.418	5.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*116*	*70-145*	
4-Bromofluorobenzene (SUR)	*91*	*70-145*	
Dibromofluoromethane (SUR)	*101*	*70-145*	
Toluene-d8 (SUR)	*105*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:10	**Site:**			
Sample #:	**421801-012**	**Client Sample #:**	SV120-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**5.1 J**	0.9	0.648	90	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Acetone	**53 J**	0.9	45	90	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.40 J**	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:10	**Site:**			
Sample #:	**421801-012**	**Client Sample #:**	SV120-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.20 J**	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*108*	*70-145*	
4-Bromofluorobenzene (SUR)	*116*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:12	**Site:**			
Sample #:	**421801-013**	**Client Sample #:**	SV120-5.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	**4.6 J**	0.9	0.648	90	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Acetone	**56 J**	0.9	45	90	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.41 J**	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.9	0.189	4.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:12	**Site:**			
Sample #:	**421801-013**	**Client Sample #:**	SV120-5.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.18 J**	0.9	0.153	4.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:25	**Site:**			
Sample #:	**421801-014**	**Client Sample #:**	SV120-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Benzene	**0.35 J**	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:25	**Site:**			
Sample #:	**421801-014**	**Client Sample #:**	SV120-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Toluene	**0.15 J**	0.7	0.119	3.5	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*97*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:30	**Site:**			
Sample #:	**421801-015**	**Client Sample #:**	SV120-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.6	0.144	3	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.6	0.09	3	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.6	0.174	3	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.6	0.444	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.6	0.198	3	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.6	0.168	3	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.6	0.072	3	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.6	0.204	3	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.6	0.144	3	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.6	0.432	60	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.6	0.162	3	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.6	30	60	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
Benzene	**0.62 J**	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.6	0.18	3	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.6	0.252	3	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.6	0.252	3	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.6	0.228	3	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.6	0.126	3	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.6	0.102	3	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:30	**Site:**			
Sample #:	**421801-015**	**Client Sample #:**	SV120-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.6	0.096	3	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.6	0.15	3	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.6	0.132	3	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.6	0.168	3	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.6	0.078	3	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.6	5.28	6	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.6	0.204	3	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Toluene	**0.16 J**	0.6	0.102	3	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.6	0.114	3	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.6	0.108	3	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.6	0.12	3	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.6	0.138	3	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.6	0.084	3	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.6	0.228	3	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:40	**Site:**			
Sample #:	**421801-016**	**Client Sample #:**	SV120-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/26/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/26/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/26/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/26/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/26/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/26/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/26/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Benzene	**0.27 J**	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/26/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/26/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/26/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/26/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:40	**Site:**			
Sample #:	**421801-016**	**Client Sample #:**	SV120-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/26/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/26/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/26/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/26/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/26/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/26/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/26/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Toluene	**0.29 J**	0.8	0.136	4	ug/Kg		11/26/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/26/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/26/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/26/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/26/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/26/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/26/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:05	**Site:**			
Sample #:	**421801-017**	**Client Sample #:**	B11-DDD-1.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 1311						QCBatchID:	QC1209951	
Arsenic	**190**	10	3.1	20	ug/L		12/18/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**54.6**	1	0.108	0.3	mg/Kg		12/04/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: STLC						QCBatchID:	QC1212551	
Arsenic	**1740**	100	13	200	ug/L		12/19/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:37	**Site:**			
Sample #:	**421801-018**	**Client Sample #:**	B20-BBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**43.9**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:41	**Site:**			
Sample #:	**421801-019**	**Client Sample #:**	B20-BBBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209681	
Arsenic	**29.8**	10	1.08	3	mg/Kg	12/07/19	12/09/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:57	**Site:**			
Sample #:	**421801-020**	**Client Sample #:**	SV121-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.49 J**	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:57	**Site:**			
Sample #:	**421801-020**	**Client Sample #:**	SV121-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Toluene	**0.18 J**	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:02	**Site:**			
Sample #:	**421801-021**	**Client Sample #:**	SV121-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.7	0.105	3.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.7	0.203	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.7	0.518	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.7	0.231	3.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.7	0.084	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.7	0.168	3.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.7	0.504	70	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.7	0.189	3.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.7	35	70	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.64 J**	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.7	0.21	3.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.7	0.294	3.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.7	0.147	3.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:02	**Site:**			
Sample #:	**421801-021**	**Client Sample #:**	SV121-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.7	0.112	3.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.7	0.175	3.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.7	0.154	3.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.7	0.196	3.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.7	0.091	3.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.7	6.16	7	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.7	0.238	3.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Toluene	**0.20 J**	0.7	0.119	3.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.7	0.133	3.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.7	0.126	3.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.7	0.14	3.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.7	0.161	3.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.7	0.098	3.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.7	0.266	3.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:07	**Site:**			
Sample #:	**421801-022**	**Client Sample #:**	SV121-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.9	0.216	4.5	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.9	0.135	4.5	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.9	0.261	4.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.9	0.666	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.9	0.297	4.5	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.9	0.108	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.9	0.306	4.5	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.9	0.216	4.5	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.9	0.648	90	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.9	0.243	4.5	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.9	45	90	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
Benzene	**0.19 J**	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.9	0.27	4.5	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.9	0.378	4.5	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.9	0.378	4.5	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.9	0.342	4.5	ug/Kg		11/27/19	ZZ	
Methylene chloride	**4.2 J**	0.9	0.189	4.5	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:07	**Site:**			
Sample #:	**421801-022**	**Client Sample #:**	SV121-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.9	0.144	4.5	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.9	0.225	4.5	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.9	0.198	4.5	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.9	0.252	4.5	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.9	0.117	4.5	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.9	7.92	9	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.9	0.306	4.5	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Toluene	ND	0.9	0.153	4.5	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.9	0.171	4.5	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.9	0.162	4.5	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.9	0.18	4.5	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.9	0.207	4.5	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.9	0.126	4.5	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.9	0.342	4.5	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 11:58	**Site:**			
Sample #:	**421801-023**	**Client Sample #:**	B12-BBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 1311						QCBatchID:	QC1209951	
Lead	**5090**	50	38	250	ug/L		12/19/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Lead	**1030**	10	1.28	5	mg/Kg		12/04/19	JP	
Method: EPA 6020 *NELAC*	Prep Method: STLC						QCBatchID:	QC1212551	
Lead	**83000**	500	50	250	ug/L		12/19/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:01	**Site:**			
Sample #:	**421801-024**	**Client Sample #:**	B12-BBBB-0.5	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209681	
Lead	**118**	1	0.128	0.5	mg/Kg	12/07/19	12/11/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:24	**Site:**			
Sample #:	**421801-025**	**Client Sample #:**	SV119-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209262	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	ZZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	ZZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	ZZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	ZZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	ZZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	ZZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	ZZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	ZZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
Benzene	**0.92 J**	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	ZZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	ZZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	ZZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	ZZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	ZZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:24	**Site:**			
Sample #:	**421801-025**	**Client Sample #:**	SV119-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	ZZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	ZZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	ZZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	ZZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	ZZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	ZZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	ZZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Toluene	**0.33 J**	0.8	0.136	4	ug/Kg		11/27/19	ZZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	ZZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	ZZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	ZZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	ZZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	ZZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*102*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:30	**Site:**			
Sample #:	**421801-026**	**Client Sample #:**	SV119-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.97 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:30	**Site:**			
Sample #:	**421801-026**	**Client Sample #:**	SV119-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.33 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*106*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:00	**Site:**			
Sample #:	**421801-027**	**Client Sample #:**	SV119-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	**2.1 J**	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.63 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:00	**Site:**			
Sample #:	**421801-027**	**Client Sample #:**	SV119-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.38 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*115*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:42	**Site:**			
Sample #:	**421801-028**	**Client Sample #:**	SV122-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.49 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:42	**Site:**			
Sample #:	**421801-028**	**Client Sample #:**	SV122-5.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.28 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*118*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*109*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:45	**Site:**			
Sample #:	**421801-029**	**Client Sample #:**	SV122-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	**0.45 J**	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:45	**Site:**			
Sample #:	**421801-029**	**Client Sample #:**	SV122-10.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	**0.20 J**	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*111*	*70-145*	
4-Bromofluorobenzene (SUR)	*114*	*70-145*	
Dibromofluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:50	**Site:**			
Sample #:	**421801-030**	**Client Sample #:**	SV122-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	**1.6 J**	1	0.72	100	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Acetone	ND	1	50	100	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Benzene	**0.97 J**	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/27/19	LZ	
Methylene chloride	**0.40 J**	1	0.21	5	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:50	**Site:**			
Sample #:	**421801-030**	**Client Sample #:**	SV122-15.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
Styrene	ND	1	0.13	5	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Toluene	**0.26 J**	1	0.17	5	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*112*	*70-145*	
4-Bromofluorobenzene (SUR)	*111*	*70-145*	
Dibromofluoromethane (SUR)	*100*	*70-145*	
Toluene-d8 (SUR)	*98*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:55	**Site:**			
Sample #:	**421801-031**	**Client Sample #:**	SV122-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	0.8	0.12	4	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	0.8	0.232	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	0.8	0.592	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	0.8	0.264	4	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	0.8	0.096	4	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	0.8	0.192	4	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	0.8	0.576	80	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	0.8	0.216	4	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Acetone	ND	0.8	40	80	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Benzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	0.8	0.24	4	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Bromoform	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Bromomethane	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Chloroethane	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Chloroform	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
Chloromethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	0.8	0.336	4	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	
Methylene chloride	ND	0.8	0.168	4	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:55	**Site:**			
Sample #:	**421801-031**	**Client Sample #:**	SV122-25.0	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	0.8	0.128	4	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	0.8	0.2	4	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	0.8	0.176	4	ug/Kg		11/27/19	LZ	
o-Xylene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	0.8	0.224	4	ug/Kg		11/27/19	LZ	
Styrene	ND	0.8	0.104	4	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	0.8	7.04	8	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	0.8	0.272	4	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Toluene	ND	0.8	0.136	4	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	0.8	0.152	4	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	0.8	0.144	4	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	0.8	0.16	4	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	0.8	0.184	4	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	0.8	0.112	4	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	0.8	0.304	4	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*114*	*70-145*	
4-Bromofluorobenzene (SUR)	*113*	*70-145*	
Dibromofluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:57	**Site:**			
Sample #:	**421801-032**	**Client Sample #:**	SV122-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID:	QC1209345	
1,1,1,2-Tetrachloroethane	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
1,1,1-Trichloroethane	ND	1	0.15	5	ug/Kg		11/27/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.29	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichloroethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.74	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,1-Dichloroethene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,1-Dichloropropene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2,3-Trichloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.33	5	ug/Kg		11/27/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
1,2-Dibromoethane	ND	1	0.12	5	ug/Kg		11/27/19	LZ	
1,2-Dichlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
1,2-Dichloroethane	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
1,2-Dichloropropane	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
1,3-Dichlorobenzene	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
1,4-Dichlorobenzene	ND	1	0.24	5	ug/Kg		11/27/19	LZ	
2,2-Dichloropropane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
2-Butanone (MEK)	ND	1	0.72	100	ug/Kg		11/27/19	LZ	
2-Chlorotoluene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
4-Chlorotoluene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
4-Isopropyltoluene	ND	1	0.27	5	ug/Kg		11/27/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Acetone	ND	1	50	100	ug/Kg		11/27/19	LZ	
Allyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Benzene	**0.36 J**	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromobenzene	ND	1	0.3	5	ug/Kg		11/27/19	LZ	
Bromochloromethane	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Bromodichloromethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Bromoform	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Bromomethane	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
Carbon Tetrachloride	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorobenzene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
Chlorodibromomethane	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Chloroethane	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Chloroform	ND	1	0.17	5	ug/Kg		11/27/19	LZ	
Chloromethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,3-dichloropropene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Dibromomethane	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Dichlorodifluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Di-isopropyl ether (DIPE)	ND	1	0.21	5	ug/Kg		11/27/19	LZ	
Ethylbenzene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Ethyl-tertbutylether (ETBE)	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Hexachlorobutadiene	ND	1	0.42	5	ug/Kg		11/27/19	LZ	
Isopropylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
m and p-Xylene	ND	1	0.38	5	ug/Kg		11/27/19	LZ	
Methylene chloride	**2.1 J**	1	0.21	5	ug/Kg		11/27/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.17	5	ug/Kg		11/27/19	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:57	**Site:**			
Sample #:	**421801-032**	**Client Sample #:**	SV122-25.0-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Naphthalene	ND	1	0.16	5	ug/Kg		11/27/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/Kg		11/27/19	LZ	
N-propylbenzene	ND	1	0.22	5	ug/Kg		11/27/19	LZ	
o-Xylene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Sec-butylbenzene	ND	1	0.28	5	ug/Kg		11/27/19	LZ	
Styrene	ND	1	0.13	5	ug/Kg		11/27/19	LZ	
t-Butyl alcohol (TBA)	ND	1	8.8	10	ug/Kg		11/27/19	LZ	
Tert-amylmethylether (TAME)	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
Tert-butylbenzene	ND	1	0.34	5	ug/Kg		11/27/19	LZ	
Tetrachloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Toluene	**0.38 J**	1	0.17	5	ug/Kg		11/27/19	LZ	
trans-1,2-dichloroethene	ND	1	0.19	5	ug/Kg		11/27/19	LZ	
trans-1,3-dichloropropene	ND	1	0.18	5	ug/Kg		11/27/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.2	5	ug/Kg		11/27/19	LZ	
Trichloroethene	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Trichlorofluoromethane	ND	1	0.23	5	ug/Kg		11/27/19	LZ	
Vinyl Chloride	ND	1	0.14	5	ug/Kg		11/27/19	LZ	
Xylenes (Total)	ND	1	0.38	5	ug/Kg		11/27/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*110*	*70-145*	
4-Bromofluorobenzene (SUR)	*110*	*70-145*	
Dibromofluoromethane (SUR)	*102*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 12:00	**Site:**			
Sample #:	**421801-033**	**Client Sample #:**	B12-BBB-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Lead	**32.0**	1	0.128	0.5	mg/Kg		12/04/19	JP	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 13:39	**Site:**			
Sample #:	**421801-034**	**Client Sample #:**	B20-BBB-0.5-DUP	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:	QC1209246	
Arsenic	**56.9**	1	0.108	0.3	mg/Kg		12/04/19	JP	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:30	**Site:**			
Sample #:	**421801-035**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3010A							QCBatchID: QC1209268		
Arsenic	ND	1	0.008	0.01	mg/L		11/27/19	KLN	
Lead	ND	1	0.005	0.01	mg/L		11/27/19	KLN	
Method: EPA 8260B *NELAC* Prep Method: EPA 5030B							QCBatchID: QC1209237		
1,1,1,2-Tetrachloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,1-Trichloroethane	ND	1	0.38	5	ug/L		11/26/19	LZ	
1,1,2,2-Tetrachloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,2-Trichloroethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	0.29	5	ug/L		11/26/19	LZ	
1,1-Dichloroethane	ND	1	0.32	5	ug/L		11/26/19	LZ	
1,1-Dichloroethene	ND	1	0.3	5	ug/L		11/26/19	LZ	
1,1-Dichloropropene	ND	1	0.25	5	ug/L		11/26/19	LZ	
1,2,3-Trichlorobenzene	ND	1	0.28	5	ug/L		11/26/19	LZ	
1,2,3-Trichloropropane	ND	1	0.16	5	ug/L		11/26/19	LZ	
1,2,4-Trichlorobenzene	ND	1	0.27	5	ug/L		11/26/19	LZ	
1,2,4-Trimethylbenzene	ND	1	0.28	5	ug/L		11/26/19	LZ	
1,2-Dibromo-3-chloropropane	ND	1	0.12	5	ug/L		11/26/19	LZ	
1,2-Dibromoethane	ND	1	0.19	5	ug/L		11/26/19	LZ	
1,2-Dichlorobenzene	ND	1	0.26	5	ug/L		11/26/19	LZ	
1,2-Dichloroethane	ND	1	0.2	5	ug/L		11/26/19	LZ	
1,2-Dichloropropane	ND	1	0.36	5	ug/L		11/26/19	LZ	
1,3,5-Trimethylbenzene	ND	1	0.24	5	ug/L		11/26/19	LZ	
1,3-Dichlorobenzene	ND	1	0.34	5	ug/L		11/26/19	LZ	
1,3-Dichloropropane	ND	1	0.19	5	ug/L		11/26/19	LZ	
1,4-Dichlorobenzene	ND	1	0.43	5	ug/L		11/26/19	LZ	
2,2-Dichloropropane	ND	1	0.32	5	ug/L		11/26/19	LZ	
2-Butanone (MEK)	ND	1	0.78	100	ug/L		11/26/19	LZ	
2-Chlorotoluene	ND	1	0.33	5	ug/L		11/26/19	LZ	
4-Chlorotoluene	ND	1	0.31	5	ug/L		11/26/19	LZ	
4-Isopropyltoluene	ND	1	0.32	5	ug/L		11/26/19	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	0.12	5	ug/L		11/26/19	LZ	
Acetone	ND	1	50	100	ug/L		11/26/19	LZ	
Allyl Chloride	ND	1	0.19	5	ug/L		11/26/19	LZ	
Benzene	ND	1	0.18	1	ug/L		11/26/19	LZ	
Bromobenzene	ND	1	0.53	5	ug/L		11/26/19	LZ	
Bromochloromethane	ND	1	0.17	5	ug/L		11/26/19	LZ	
Bromodichloromethane	ND	1	0.31	5	ug/L		11/26/19	LZ	
Bromoform	ND	1	0.13	5	ug/L		11/26/19	LZ	
Bromomethane	ND	1	0.68	5	ug/L		11/26/19	LZ	
Carbon Tetrachloride	ND	1	0.27	5	ug/L		11/26/19	LZ	
Chlorobenzene	ND	1	0.19	5	ug/L		11/26/19	LZ	
Chlorodibromomethane	ND	1	0.21	5	ug/L		11/26/19	LZ	
Chloroethane	ND	1	0.45	5	ug/L		11/26/19	LZ	
Chloroform	ND	1	0.18	5	ug/L		11/26/19	LZ	
Chloromethane	ND	1	0.27	5	ug/L		11/26/19	LZ	
cis-1,2-Dichloroethene	ND	1	0.27	5	ug/L		11/26/19	LZ	
cis-1,3-dichloropropene	ND	1	0.25	5	ug/L		11/26/19	LZ	
cis-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		11/26/19	LZ	
Dibromomethane	ND	1	0.23	5	ug/L		11/26/19	LZ	
Dichlorodifluoromethane	ND	1	0.33	5	ug/L		11/26/19	LZ	
Ethylbenzene	ND	1	0.21	5	ug/L		11/26/19	LZ	
Hexachlorobutadiene	ND	1	0.51	5	ug/L		11/26/19	LZ	
Isopropylbenzene	ND	1	0.24	5	ug/L		11/26/19	LZ	
m and p-Xylene	ND	1	0.45	5	ug/L		11/26/19	LZ	

Matrix:	Water	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	11/23/2019 14:30	**Site:**			
Sample #:	**421801-035**	**Client Sample #:**	EB-01	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Methylene chloride	ND	1	0.16	5	ug/L		11/26/19	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L		11/26/19	LZ	
Naphthalene	ND	1	0.25	5	ug/L		11/26/19	LZ	
N-butylbenzene	ND	1	0.25	5	ug/L		11/26/19	LZ	
N-propylbenzene	ND	1	0.31	5	ug/L		11/26/19	LZ	
o-Xylene	ND	1	0.29	5	ug/L		11/26/19	LZ	
Sec-butylbenzene	ND	1	0.32	5	ug/L		11/26/19	LZ	
Styrene	ND	1	0.22	5	ug/L		11/26/19	LZ	
Tert-butylbenzene	ND	1	0.4	5	ug/L		11/26/19	LZ	
Tetrachloroethene	ND	1	0.18	5	ug/L		11/26/19	LZ	
Toluene	ND	1	0.24	5	ug/L		11/26/19	LZ	
trans-1,2-dichloroethene	ND	1	0.33	5	ug/L		11/26/19	LZ	
trans-1,3-dichloropropene	ND	1	0.23	5	ug/L		11/26/19	LZ	
trans-1,4-dichloro-2-butene	ND	1	0.17	5	ug/L		11/26/19	LZ	
Trichloroethene	ND	1	0.39	5	ug/L		11/26/19	LZ	
Trichlorofluoromethane	ND	1	0.25	5	ug/L		11/26/19	LZ	
Vinyl Chloride	ND	1	0.18	5	ug/L		11/26/19	LZ	
Xylenes (Total)	ND	1	0.45	5	ug/L		11/26/19	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*102*	*70-145*	
4-Bromofluorobenzene (SUR)	*118*	*70-145*	
Dibromofluoromethane (SUR)	*103*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

QCBatchID: QC1209213	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209213MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209213	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209213MB1					
Methylene chloride	**1.9 J**	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209213LCS1, QC1209213LCSD1											
1,1-Dichloroethene	50	50	59	56	ug/Kg	118	112	5	59-172	22	
Benzene	50	50	49	46	ug/Kg	98	92	6	62-137	24	
Chlorobenzene	50	50	46	44	ug/Kg	92	88	4	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	41	40	ug/Kg	82	80	2	62-137	21	
Toluene	50	50	51	47	ug/Kg	102	94	8	59-139	21	
Trichloroethene	50	50	53	47	ug/Kg	106	94	12	66-142	21	

QCBatchID: QC1209223	Analyst: sandyw	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209223MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209223	Analyst: sandyw	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209223MB1					
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209223LCS1											
1,1-Dichloroethene	50		55		ug/Kg	110			59-172		
Benzene	50		49		ug/Kg	98			62-137		
Chlorobenzene	50		52		ug/Kg	104			60-133		
Methyl-t-butyl Ether (MTBE)	50		43		ug/Kg	86			62-137		
Toluene	50		51		ug/Kg	102			59-139		
Trichloroethene	50		58		ug/Kg	116			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209223MS1, QC1209223MSD1												**Source: 421780-006**
1,1-Dichloroethene	ND	50	50	55	53	ug/Kg	110	106	3.7	59-172	22	
Benzene	ND	50	50	50	48	ug/Kg	100	96	4.1	62-137	24	
Chlorobenzene	ND	50	50	48	47	ug/Kg	96	94	2.1	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	44	45	ug/Kg	88	90	2.2	62-137	21	
Toluene	ND	50	50	47	46	ug/Kg	94	92	2.2	59-139	21	
Trichloroethene	ND	50	50	52	49	ug/Kg	104	98	5.9	66-142	21	

QCBatchID: QC1209237	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209237MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,1-Trichloroethane	ND	ug/L	0.38	5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,2-Trichloroethane	ND	ug/L	0.25	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.29	5	
1,1-Dichloroethane	ND	ug/L	0.32	5	
1,1-Dichloroethene	ND	ug/L	0.3	5	
1,1-Dichloropropene	ND	ug/L	0.25	5	
1,2,3-Trichlorobenzene	ND	ug/L	0.28	5	
1,2,3-Trichloropropane	ND	ug/L	0.16	5	
1,2,4-Trichlorobenzene	ND	ug/L	0.27	5	
1,2,4-Trimethylbenzene	ND	ug/L	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.12	5	
1,2-Dibromoethane	ND	ug/L	0.19	5	
1,2-Dichlorobenzene	ND	ug/L	0.26	5	
1,2-Dichloroethane	ND	ug/L	0.2	5	
1,2-Dichloropropane	ND	ug/L	0.36	5	
1,3,5-Trimethylbenzene	ND	ug/L	0.24	5	
1,3-Dichlorobenzene	ND	ug/L	0.34	5	
1,3-Dichloropropane	ND	ug/L	0.19	5	
1,4-Dichlorobenzene	ND	ug/L	0.43	5	
2,2-Dichloropropane	ND	ug/L	0.32	5	
2-Butanone (MEK)	ND	ug/L	0.78	100	
2-Chlorotoluene	ND	ug/L	0.33	5	
4-Chlorotoluene	ND	ug/L	0.31	5	
4-Isopropyltoluene	ND	ug/L	0.32	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.12	5	
Acetone	ND	ug/L	50	100	
Allyl Chloride	ND	ug/L	0.19	5	
Benzene	ND	ug/L	0.18	1	
Bromobenzene	ND	ug/L	0.53	5	
Bromochloromethane	ND	ug/L	0.17	5	
Bromodichloromethane	ND	ug/L	0.31	5	
Bromoform	ND	ug/L	0.13	5	
Bromomethane	ND	ug/L	0.68	5	
Carbon Tetrachloride	ND	ug/L	0.27	5	
Chlorobenzene	ND	ug/L	0.19	5	
Chlorodibromomethane	ND	ug/L	0.21	5	
Chloroethane	ND	ug/L	0.45	5	
Chloroform	ND	ug/L	0.18	5	
Chloromethane	ND	ug/L	0.27	5	
cis-1,2-Dichloroethene	ND	ug/L	0.27	5	
cis-1,3-dichloropropene	ND	ug/L	0.25	5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Dibromomethane	ND	ug/L	0.23	5	
Dichlorodifluoromethane	ND	ug/L	0.33	5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	1	
Ethylbenzene	ND	ug/L	0.21	5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.23	1	
Hexachlorobutadiene	ND	ug/L	0.51	5	
Isopropylbenzene	ND	ug/L	0.24	5	
m and p-Xylene	ND	ug/L	0.45	5	

QCBatchID: QC1209237	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 11/25/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209237MB1					
Methylene chloride	**0.70 J**	ug/L	0.16	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.19	1	
Naphthalene	ND	ug/L	0.25	5	
N-butylbenzene	ND	ug/L	0.25	5	
N-propylbenzene	ND	ug/L	0.31	5	
o-Xylene	ND	ug/L	0.29	5	
Sec-butylbenzene	ND	ug/L	0.32	5	
Styrene	ND	ug/L	0.22	5	
t-Butyl alcohol (TBA)	ND	ug/L	5.2	10	
Tert-amylmethylether (TAME)	ND	ug/L	0.19	5	
Tert-butylbenzene	ND	ug/L	0.4	5	
Tetrachloroethene	ND	ug/L	0.8	5	
Toluene	ND	ug/L	0.24	5	
trans-1,2-dichloroethene	ND	ug/L	0.33	5	
trans-1,3-dichloropropene	ND	ug/L	0.23	5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Trichloroethene	ND	ug/L	0.39	5	
Trichlorofluoromethane	ND	ug/L	0.25	5	
Vinyl Chloride	ND	ug/L	0.18	5	
Xylenes (Total)	ND	ug/L	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209237LCS1											
1,1-Dichloroethene	50		56		ug/L	112			59-172		
Benzene	50		49		ug/L	98			62-137		
Chlorobenzene	50		51		ug/L	102			60-133		
Methyl-t-butyl Ether (MTBE)	50		43		ug/L	86			62-137		
Toluene	50		49		ug/L	98			59-139		
Trichloroethene	50		54		ug/L	108			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209237MS1, QC1209237MSD1												**Source: 421782-006**
1,1-Dichloroethene	4.8	50	50	60	55	ug/L	110	100	8.7	59-172	22	
Benzene	1.1	50	50	52	49	ug/L	102	96	5.9	62-137	24	
Chlorobenzene	ND	50	50	52	50	ug/L	104	100	3.9	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	48	48	ug/L	96	96	0.0	62-137	21	
Toluene	ND	50	50	49	48	ug/L	98	96	2.1	59-139	21	
Trichloroethene	2800	50	50	2500	2300	ug/L	0	0	8.3	66-142	21	NC

QCBatchID: QC1209240	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209240MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209240	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209240MB1					
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209240LCS1											
1,1-Dichloroethene	50		61		ug/Kg	122			59-172		
Benzene	50		49		ug/Kg	98			62-137		
Chlorobenzene	50		47		ug/Kg	94			60-133		
Methyl-t-butyl Ether (MTBE)	50		34		ug/Kg	68			62-137		
Toluene	50		53		ug/Kg	106			59-139		
Trichloroethene	50		54		ug/Kg	108			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209240MS1, QC1209240MSD1												**Source: 421798-004**
1,1-Dichloroethene	ND	50	50	56	53	ug/Kg	112	106	5.5	59-172	22	
Benzene	ND	50	50	48	47	ug/Kg	96	94	2.1	62-137	24	
Chlorobenzene	ND	50	50	44	42	ug/Kg	88	84	4.7	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	44	44	ug/Kg	88	88	0.0	62-137	21	
Toluene	ND	50	50	47	46	ug/Kg	94	92	2.2	59-139	21	
Trichloroethene	ND	50	50	47	46	ug/Kg	94	92	2.2	66-142	21	

QCBatchID:	**QC1209246**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	11/26/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209246MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209246LCS1											
Arsenic	50		45.0		mg/Kg	90			80-120		
Lead	50		46.6		mg/Kg	93			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209246MS1, QC1209246MSD1												**Source: 421785-001**
Arsenic	4.81	50	50	39.4	42.0	mg/Kg	69	74	6.4	75-125	20	M
Lead	4.81	50	50	42.1	45.6	mg/Kg	75	82	8.0	75-125	20	M

QCBatchID: QC1209262	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209262MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209262	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/26/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209262MB1					
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209262LCS1, QC1209262LCSD1											
1,1-Dichloroethene	50	50	58	58	ug/Kg	116	116	0	59-172	22	
Benzene	50	50	51	52	ug/Kg	102	104	2	62-137	24	
Chlorobenzene	50	50	52	53	ug/Kg	104	106	2	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	43	44	ug/Kg	86	88	2	62-137	21	
Toluene	50	50	51	53	ug/Kg	102	106	4	59-139	21	
Trichloroethene	50	50	58	59	ug/Kg	116	118	2	66-142	21	

QCBatchID: QC1209268	Analyst: rvenegas	Method: EPA 6010B
Matrix: Water	Analyzed: 11/26/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209268MB1					
Antimony	**0.044**	mg/L	0.014	0.04	B
Arsenic	ND	mg/L	0.008	0.01	
Barium	ND	mg/L	0.002	0.01	
Beryllium	ND	mg/L	0.001	0.005	
Cadmium	ND	mg/L	0.002	0.005	
Chromium	ND	mg/L	0.002	0.01	
Cobalt	ND	mg/L	0.002	0.005	
Copper	ND	mg/L	0.001	0.01	
Lead	ND	mg/L	0.005	0.01	
Molybdenum	ND	mg/L	0.005	0.01	
Nickel	ND	mg/L	0.003	0.02	
Selenium	**0.029 J**	mg/L	0.016	0.03	
Silver	ND	mg/L	0.003	0.005	
Thallium	ND	mg/L	0.009	0.05	
Tin	ND	mg/L	0.008	0.05	
Titanium	ND	mg/L	0.002	0.01	
Vanadium	ND	mg/L	0.002	0.005	
Zinc	ND	mg/L	0.017	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268LCS1											
Antimony	2		2.02		mg/L	101			80-120		
Arsenic	2		2.02		mg/L	101			80-120		
Barium	2		2.10		mg/L	105			80-120		
Beryllium	2		2.10		mg/L	105			80-120		
Cadmium	2		2.17		mg/L	109			80-120		
Chromium	2		2.10		mg/L	105			80-120		
Cobalt	2		2.13		mg/L	107			80-120		
Copper	2		2.07		mg/L	104			80-120		
Lead	2		2.07		mg/L	104			80-120		
Molybdenum	2		2.05		mg/L	103			80-120		
Nickel	2		2.16		mg/L	108			80-120		
Selenium	2		2.00		mg/L	100			80-120		
Silver	2		2.08		mg/L	104			80-120		
Thallium	2		2.08		mg/L	104			80-120		
Vanadium	2		2.20		mg/L	110			80-120		
Zinc	2		2.30		mg/L	115			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268MS1, QC1209268MSD1												**Source: 421801-035**
Antimony	0.036	1	1	1.04	1.03	mg/L	100	99	1.0	75-125	20	
Arsenic	ND	1	1	1.03	0.998	mg/L	103	100	3.2	75-125	20	
Barium	ND	1	1	1.07	1.06	mg/L	107	106	0.9	75-125	20	
Beryllium	ND	1	1	0.955	1.000	mg/L	96	100	4.6	75-125	20	
Cadmium	ND	1	1	1.10	1.09	mg/L	110	109	0.9	75-125	20	
Chromium	ND	1	1	1.07	1.06	mg/L	107	106	0.9	75-125	20	
Cobalt	ND	1	1	1.10	1.09	mg/L	110	109	0.9	75-125	20	
Copper	ND	1	1	0.952	1.00	mg/L	95	100	4.9	75-125	20	

QCBatchID: QC1209268	Analyst: rvenegas	Method: EPA 6010B
Matrix: Water	Analyzed: 11/26/2019	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209268MS1, QC1209268MSD1												**Source: 421801-035**
Lead	ND	1	1	1.08	1.06	mg/L	108	106	1.9	75-125	20	
Molybdenum	ND	1	1	1.05	1.04	mg/L	105	104	1.0	75-125	20	
Nickel	ND	1	1	1.11	1.10	mg/L	111	110	0.9	75-125	20	
Selenium	0.038	1	1	1.03	1.03	mg/L	99	99	0.0	75-125	20	
Silver	ND	1	1	0.978	1.02	mg/L	98	102	4.2	75-125	20	
Thallium	ND	1	1	1.08	1.06	mg/L	108	106	1.9	75-125	20	
Vanadium	0.004	1	1	1.03	1.08	mg/L	103	108	4.7	75-125	20	
Zinc	ND	1	1	1.17	1.15	mg/L	117	115	1.7	75-125	20	

QCBatchID: QC1209345	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/27/2019	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209345MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	

QCBatchID: QC1209345	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 11/27/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209345MB1					
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209345LCS1, QC1209345LCSD1											
1,1-Dichloroethene	50	50	63	62	ug/Kg	126	124	2	59-172	22	
Benzene	50	50	55	55	ug/Kg	110	110	0	62-137	24	
Chlorobenzene	50	50	55	55	ug/Kg	110	110	0	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	47	46	ug/Kg	94	92	2	62-137	21	
Toluene	50	50	55	54	ug/Kg	110	108	2	59-139	21	
Trichloroethene	50	50	58	57	ug/Kg	116	114	2	66-142	21	

QCBatchID:	**QC1209681**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	12/07/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209681MB1					
Arsenic	ND	mg/Kg	0.108	0.3	
Lead	ND	mg/Kg	0.128	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1209681LCS1											
Arsenic	50		47.1		mg/Kg	94			80-120		
Lead	50		47.6		mg/Kg	95			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1209681MS1, QC1209681MSD1												**Source: 421801-019**
Arsenic	29.8	50	50	75.0	73.2	mg/Kg	90	87	2.4	75-125	20	
Lead	112	50	50	171	171	mg/Kg	118	118	0.0	75-125	20	

QCBatchID:	**QC1209951**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	12/13/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1209951MB1					
Arsenic	ND	ug/L	0.31	2	
Lead	ND	ug/L	0.76	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209951LCS1											
Arsenic	50		51.7		ug/L	103			80-120		
Lead	50		53.6		ug/L	107			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1209951MS1, QC1209951MSD1												**Source: 421801-017**
Arsenic	190	50	50	242	241	ug/L	104	102	0.4	80-120		
Lead	ND	50	50	53.1	52.9	ug/L	106	106	0.4	80-120		

QCBatchID:	**QC1212551**	**Analyst:**	rvenegas	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	12/14/2019	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1212551MB1					
Arsenic	ND	ug/L	0.13	2	
Lead	**11.8**	ug/L	0.1	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1212551LCS1, QC1212551LCSD1											
Arsenic	500	500	529	521	ug/L	106	104	2	80-120	20	
Lead	500	500	440	432	ug/L	88	86	2	80-120	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

Patty Mata

From: Clare Steedman <clare.steedman@terraphase.com> on behalf of Clare Steedman
Sent: Tuesday, December 10, 2019 6:28 PM
To: Patty Mata
Subject: RE: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Yes please, run the STLC/TCLP on the sample that had the 1,030 mg/kg lead result, 421801-23.
Clare

From: Patty Mata <patty.mata@enthalpy.com>
Sent: Tuesday, December 10, 2019 4:54 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Subject: RE: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Clare,

Sample number 421801-23 has only 3 B's in the sample ID. This is the sample that needs STLC and TCLP, correct? It had total Lead result of 1030 mg/kg. The sample ID with 4 B's is my number -24 and you had just requested Total Lead for that sample last week.

In observance of Christmas and New Year, Enthalpy Analytical will be closed on Tuesday December 24th at 2PM through Thursday December 26th and Wednesday January 1st. Normal operation will resume on Friday December 27th through December 31st and on Thursday January 2nd. During this period, samples with holding time less than 48 hours will only be accepted if they were pre-arranged with the project managers. Please be advised that holiday surcharges might apply.

With Regards,

Patty Mata
Project Manager
Direct (714) 771-9930

ENTHALPY ANALYTICAL

From: Clare Steedman <clare.steedman@terraphase.com>
Sent: Tuesday, December 10, 2019 3:44 PM
To: Patty Mata <patty.mata@enthalpy.com>
Subject: RE: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Patty,

Would you please run the following analyses on regular turn? Thanks!

421801-023, B12-BBBB-0.5: STLC and TCLP leaching, then 6020 for lead
412801-017, B11-DDD-1.5: STLC and TCLP leaching, then 6020 for arsenic

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Patty Mata <patty.mata@enthalpy.com>
Sent: Thursday, December 05, 2019 12:24 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Cc: Luke Russell <luke.russell@terraphase.com>; Dan Phelps <dan.phelps@terraphase.com>; Tanner Rickard <tanner.rickard@terraphase.com>
Subject: Revised Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Clare Steedman,

Attached is your revised final report #421801. We corrected the metal for sample B20-BBB-0.5-DUP in this report. Sorry again for the error!

Thank you.

In accordance with our paperless initiative, we are no longer mailing or faxing reports by default. If you require a hard copy, please inform your Project Manager.

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

With Regards,

Patty Mata
Project Manager

931 W. Barkley Ave., Orange, CA 92868
O: 714.771.6900
D: 714.771.9930
Patty.mata@enthalpy.com

To help protect the air we breathe, the water we drink, and the soil that feeds us.

Please take a moment to provide customer feedback.

Patty Mata

From: Clare Steedman <clare.steedman@terraphase.com> on behalf of Clare Steedman
Sent: Thursday, December 05, 2019 11:19 AM
To: Patty Mata
Subject: RE: Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Thank you Patty.

Please run the following held analyses:

- 421801-019, B20-BBBB-0.5, for arsenic by 6020
- 421801-024, B12-BBBB-0.5 for lead by 6020

Clare Steedman, P.G.
Senior Associate Geologist
Terraphase Engineering Inc.
18401 Von Karman Avenue, Suite 410 | Irvine, California 92612 | www.terraphase.com
phone: 949.377.2227 ext. 89 | cell: 213.422.5850
clare.steedman@terraphase.com

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From: Patty Mata <patty.mata@enthalpy.com>
Sent: Wednesday, December 04, 2019 7:56 PM
To: Clare Steedman <clare.steedman@terraphase.com>
Cc: Luke Russell <luke.russell@terraphase.com>; Dan Phelps <dan.phelps@terraphase.com>; Tanner Rickard <tanner.rickard@terraphase.com>
Subject: Hamilton HS (11/23/19) - Enthalpy Analytical Final Report #421801

Hi Clare Steedman,

Attached is your final report #421801.

Thank you.

In accordance with our paperless initiative, we are no longer mailing or faxing reports by default. If you require a hard copy, please inform your Project Manager.

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

With Regards,

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: 92180	Standard: X · 4 Day: · 3 Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	Page: 1 of 4	2 Day: · 1 Day: · Same Day:

ENTHALPY ANALYTICAL

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	—
Address:	18401 Von Karman Ave, Ste410	Address:	2295 Robertson Blvd.
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	—
Fax:	—	Sampled By:	Tanner / Wes

Analysis Request: VOCs (8260)

Test Instructions / Comments: EsDat Format

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)
1	SV117-5.0	11/23/19	0835	S	3 voa	1,6	X
2	SV117-10.0		0845				X
3	SV117-15.0		0900				X
4	SV117-15.0-DUP		0902				X
5	SV117-25.0		0905				X
6	SV119-5.0		0930				X
7	SV118-5.0		0940				X
8	SV118-10.0		1000				X
9	SV118-15.0		1004				X
10	SV118-25.0	11/23/19	1012	S	3Voa	1,6	X

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	KAD TRAN	E.A	11/25/19 1420
2 Relinquished By:	[signature]	KAD TRAN	E.A	11/25/19 1543
2 Received By:	[signature]	[signature]	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 2 of 4	Standard: X 4 Day: 3 Day: 2 Day: 1 Day: Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton HS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	--
Address:	18401 Von Karman Ave. Ste 410	Address:	2295 Robertson Blvd
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	-
Fax:	-	Sampled By:	Tanner/Wes

Analysis Request: VOCs (8260); As 6020; ~~Pb 6020~~; HOLD

Test Instructions / Comments: Es Dat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)	As 6020	~~Pb 6020~~	HOLD						
1	SV121 - 5.0	11/23/19	1056	S	3 Voa	1.6	X									
2	SV120 - 5.0	↓	1110	↓	↓	↓	X									
3	SV120 - 5.0 - DUP		1112				X									
4	SV120 - 10.0		1125				X									
5	SV120 - 15.0		1130				X									
6	SV120 - 25.0		1140		3 Voa	1.6	X									
7	B11 - DDD - 1.5		1105		1x Jar	Ice		X								
8	B20 - BBB - 0.5	↓	1137		1x Jar	↓		X								
9	B20 - BBBB - 0.5		1141	↓	1 JAR	Ice		~~X~~	do	X						
10	SV121 - 10.0	11/23/19	1257	S	3 Voa	1.6	X									

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	[illegible]	E.A	11/25/19 1420
2 Relinquished By:	[signature]	[illegible]	E.A	11/25/19 1543
2 Received By:	[signature]	G Kim	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave, Orange, CA 92868	Lab No:	Standard:	X	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 3 of 4	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - Orange	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group							
P.O. Box 741137, Los Angeles, CA 90074-1137							

ENTHALPY ANALYTICAL

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton MS
Report To:	Clare Steedman	Number:	S030.008.003
Email:	clare.steedman@terraphase.com	P.O. #:	-
Address:	18401 Von Karman Ave, Ste 410	Address:	2295 Robertson Blvd
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	-
Fax:	-	Sampled By:	Tanner / Wes

Analysis Request

Test Instructions / Comments: Es Dat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOCs (8260)	Pb (6020)	HOLD								
1	SV121-15.0	11/23/19	1302	S	3 Voa's	1,6	X										
2	SV121-25.0	↓	1307	↓	3 Voas	1,6	X										
3	B12-BBB-0.5	↓	1158	↓	1x Jar	Ice		X									
4	B12-BBBB-0.5	↓	1201	↓	1x Jar	Ice			X								
5	SV119-10.0	↓	1324	↓	3 Voa's	1,6	X										
6	SV119-15.0	↓	1330	↓	↓	↓	X										
7	SV119-25.0	↓	1400	↓	↓	↓	X										
8	SV122-5.0	↓	1342	↓	↓	↓	X										
9	SV122-10.0	↓	1345	↓	↓	↓	X										
10	SV122-15.0	11/23/19	1350	S	3 Voas	1,6	X										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	KAO TRAN	E-A	11/25/19 1420
2 Relinquished By:	[signature]	KAO TRAN	E-A	11/25/19 1543
2 Received By:	[signature]	[signature]	EA	11/28/19 1843
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: Page: 4 of 4	Standard: X; 4 Day: ; 3 Day: ; 2 Day: ; 1 Day: ; Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Name:	Hamilton MS
Report To:	Clare Steedman	Number:	5030-008.003
Email:	clare.steedman@terraphase.com	P.O. #:	—
Address:	18401 Von Karman Ave Ste 410	Address:	2295 Robertson Blvd.
	Irvine, CA 92612		Los Angeles, CA
Phone:	949-377-2227	Global ID:	—
Fax:	—	Sampled By:	Tanner Weiz

Analysis Request: VOC 8260; Pb 6020; As 6020; Pb + As 6010

Test Instructions / Comments: EsDat

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	VOC 8260	Pb 6020	As 6020	Pb + As 6010						
1	SV122 - 25.0	11/23/19	1355	S	3 VOA	1,5	X									
2	SV122 - 25.0 - DUP		1357		↓	1,6	X									
3	B12 - BBB - 0.5 - DUP		1200		1 JAR	Ice		X								
4	B20 - BBB - 0.5 - DUP		1139		1 JAR	Ice			X							
5	BB - 01	11/23/19	1430	W	500 mL, 3 VOA	3,2	X			X						
6																
7																
8																
9																
10																

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Tanner Rickard	TEI / Geologist	11/25/19 1420
1 Received By:	[signature]	[illegible]	E-A	11/25/19 1420
2 Relinquished By:	[signature]	[illegible]	E-A	11/25/19 1543
2 Received By:	[signature]	G. Kim	EA	11/25/19 1543
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase Project: Hamilton HS

Date Received: 11/25/19 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 3.8 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.2 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?		✓	
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 11/25/19

Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	Terraphase Engineering
Address:	18401 Von Karman Ave, Suite #410 Irvine, CA 92612
Attn:	Clare Steedman
Comments:	Hamilton HS S030.008.003 2955 S Robertson Blvd

Lab Request:	423978
Report Date:	01/30/2020
Date Received:	01/21/2020
Client ID:	15743

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
423978-001	DRUM 1
423978-002	DRUM 2
423978-003	DRUM 3
423978-004	DRUM 4
423978-005	WASTE-1.21.20

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Patricia Mata, PM

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	01/21/2020 07:00	**Site:**			
Sample #:	**423978-001**	**Client Sample #:**	DRUM 1	**Sample Type:**	

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:					QCBatchID:		
N/A	**N/A**	1						

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	01/21/2020 07:05	**Site:**			
Sample #:	**423978-002**	**Client Sample #:**	DRUM 2	**Sample Type:**	

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:					QCBatchID:		
N/A	**N/A**	1						

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	01/21/2020 07:07	**Site:**			
Sample #:	**423978-003**	**Client Sample #:**	DRUM 3	**Sample Type:**	

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:					QCBatchID:		
N/A	**N/A**	1						

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	Client
Sampled:	01/21/2020 07:10	**Site:**			
Sample #:	**423978-004**	**Client Sample #:**	DRUM 4	**Sample Type:**	

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:					QCBatchID:		
N/A	**N/A**	1						

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	
Sampled:	01/21/2020	**Site:**			
Sample #:	**423978-005**	**Client Sample #:**	WASTE-1.21.20	**Sample Type:**	

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B						QCBatchID: QC1213861		
Antimony	ND	1	3	mg/Kg		01/24/20	SBW	
Arsenic	**14.3**	1	1	mg/Kg		01/24/20	SBW	
Barium	**165**	1	1	mg/Kg		01/24/20	SBW	
Beryllium	ND	1	0.5	mg/Kg		01/24/20	SBW	
Cadmium	**2.27**	1	0.5	mg/Kg		01/24/20	SBW	
Chromium	**42.4**	1	1	mg/Kg		01/24/20	SBW	
Cobalt	**13.5**	1	0.5	mg/Kg		01/24/20	SBW	
Copper	**30.0**	1	1	mg/Kg		01/24/20	SBW	
Lead	**7.88**	1	1	mg/Kg		01/24/20	SBW	
Molybdenum	**2.12**	1	1	mg/Kg		01/24/20	SBW	
Nickel	**37.1**	1	1.5	mg/Kg		01/27/20	SBW	
Selenium	ND	1	3	mg/Kg		01/24/20	SBW	
Silver	ND	1	0.5	mg/Kg		01/24/20	SBW	
Thallium	ND	1	3	mg/Kg		01/24/20	SBW	
Vanadium	**89.6**	1	0.5	mg/Kg		01/24/20	SBW	
Zinc	**71.0**	1	5	mg/Kg		01/24/20	SBW	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A						QCBatchID: QC1213864		
Mercury	ND	1	0.14	mg/Kg	01/23/20	01/24/20		
Method: EPA 8015M Prep Method: EPA 3580A						QCBatchID: QC1213990		
DRO (C10 to C28)	ND	1	10	mg/Kg	01/28/20	01/29/20	TW	
GRO (C8 to C10)	ND	1	10	mg/Kg	01/28/20	01/29/20	TW	
ORO (C28 to C40)	ND	1	20	mg/Kg	01/28/20	01/29/20	TW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*106*	*50-150*	

Method: EPA 8260B *NELAC* Prep Method: EPA 5030						QCBatchID: QC1213785		
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ	
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ	
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ	
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ	
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ	
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ	
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ	
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ	
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ	
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ	
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ	
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ	
Acetone	ND	1	100	ug/Kg		01/22/20	LZ	

Matrix:	Solid	**Client:**	Terraphase Engineering	**Collector:**	
Sampled:	01/21/2020	**Site:**			
Sample #:	**423978-005**	**Client Sample #:**	WASTE-1.21.20	**Sample Type:**	

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ	
Benzene	ND	1	5	ug/Kg		01/22/20	LZ	
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ	
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ	
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ	
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ	
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ	
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ	
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ	
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ	
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ	
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ	
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ	
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ	
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ	
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ	
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ	
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ	
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ	
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ	
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ	
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
Styrene	ND	1	5	ug/Kg		01/22/20	LZ	
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ	
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ	
Toluene	ND	1	5	ug/Kg		01/22/20	LZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ	
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ	
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ	
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*99*	*66.7-166.6*	
4-Bromofluorobenzene (SUR)	*98*	*70-145*	
Dibromofluoromethane (SUR)	*96*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

QCBatchID: QC1213785	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 01/22/2020	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units		RDL	Notes
QC1213785MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg		5	
1,1,1-Trichloroethane	ND	ug/Kg		5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg		5	
1,1,2-Trichloroethane	ND	ug/Kg		5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg		5	
1,1-Dichloroethane	ND	ug/Kg		5	
1,1-Dichloroethene	ND	ug/Kg		5	
1,1-Dichloropropene	ND	ug/Kg		5	
1,2,3-Trichlorobenzene	ND	ug/Kg		5	
1,2,3-Trichloropropane	ND	ug/Kg		5	
1,2,4-Trichlorobenzene	ND	ug/Kg		5	
1,2,4-Trimethylbenzene	ND	ug/Kg		5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg		5	
1,2-Dibromoethane	ND	ug/Kg		5	
1,2-Dichlorobenzene	ND	ug/Kg		5	
1,2-Dichloroethane	ND	ug/Kg		5	
1,2-Dichloropropane	ND	ug/Kg		5	
1,3,5-Trimethylbenzene	ND	ug/Kg		5	
1,3-Dichlorobenzene	ND	ug/Kg		5	
1,3-Dichloropropane	ND	ug/Kg		5	
1,4-Dichlorobenzene	ND	ug/Kg		5	
2,2-Dichloropropane	ND	ug/Kg		5	
2-Butanone (MEK)	ND	ug/Kg		100	
2-Chloroethyl Vinyl Ether	ND	ug/Kg		5	
2-Chlorotoluene	ND	ug/Kg		5	
4-Chlorotoluene	ND	ug/Kg		5	
4-Isopropyltoluene	ND	ug/Kg		5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg		5	
Acetone	ND	ug/Kg		100	
Allyl Chloride	ND	ug/Kg		5	
Benzene	ND	ug/Kg		5	
Bromobenzene	ND	ug/Kg		5	
Bromochloromethane	ND	ug/Kg		5	
Bromodichloromethane	ND	ug/Kg		5	
Bromoform	ND	ug/Kg		5	
Bromomethane	ND	ug/Kg		5	
Carbon Tetrachloride	ND	ug/Kg		5	
Chlorobenzene	ND	ug/Kg		5	
Chlorodibromomethane	ND	ug/Kg		5	
Chloroethane	ND	ug/Kg		5	
Chloroform	ND	ug/Kg		5	
Chloromethane	ND	ug/Kg		5	
cis-1,2-Dichloroethene	ND	ug/Kg		5	
cis-1,3-dichloropropene	ND	ug/Kg		5	
cis-1,4-dichloro-2-butene	ND	ug/Kg		5	
Dibromomethane	ND	ug/Kg		5	
Dichlorodifluoromethane	ND	ug/Kg		5	
Di-isopropyl ether (DIPE)	ND	ug/Kg		5	
Ethylbenzene	ND	ug/Kg		5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg		5	
Hexachlorobutadiene	ND	ug/Kg		5	
Isopropylbenzene	ND	ug/Kg		5	

QCBatchID: QC1213785	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 01/22/2020	Instrument: VOA-MS (group)

Analyte	Blank Result	Units		RDL	Notes
QC1213785MB1					
m and p-Xylene	ND	ug/Kg		5	
Methylene chloride	ND	ug/Kg		5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg		5	
Naphthalene	ND	ug/Kg		5	
N-butylbenzene	ND	ug/Kg		5	
N-propylbenzene	ND	ug/Kg		5	
o-Xylene	ND	ug/Kg		5	
Sec-butylbenzene	ND	ug/Kg		5	
Styrene	ND	ug/Kg		5	
t-Butyl alcohol (TBA)	ND	ug/Kg		10	
Tert-amylmethylether (TAME)	ND	ug/Kg		5	
Tert-butylbenzene	ND	ug/Kg		5	
Tetrachloroethene	ND	ug/Kg		5	
Toluene	ND	ug/Kg		5	
trans-1,2-dichloroethene	ND	ug/Kg		5	
trans-1,3-dichloropropene	ND	ug/Kg		5	
trans-1,4-dichloro-2-butene	ND	ug/Kg		5	
Trichloroethene	ND	ug/Kg		5	
Trichlorofluoromethane	ND	ug/Kg		5	
Vinyl Chloride	ND	ug/Kg		5	
Xylenes (Total)	ND	ug/Kg		5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213785LCS1											
1,1-Dichloroethene	50		49		ug/Kg	98			59-172		
Benzene	50		58		ug/Kg	116			62-137		
Chlorobenzene	50		54		ug/Kg	108			60-133		
Methyl-t-butyl Ether (MTBE)	50		34		ug/Kg	68			62-137		
Toluene	50		56		ug/Kg	112			59-139		
Trichloroethene	50		55		ug/Kg	110			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213785MS1, QC1213785MSD1												**Source: 424016-001**
1,1-Dichloroethene	ND	50	50	48	46	ug/Kg	96	92	4.3	59-172	22	
Benzene	ND	50	50	56	54	ug/Kg	112	108	3.6	62-137	24	
Chlorobenzene	ND	50	50	49	48	ug/Kg	98	96	2.1	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	33	33	ug/Kg	66	66	0.0	62-137	21	
Toluene	ND	50	50	54	52	ug/Kg	108	104	3.8	59-139	21	
Trichloroethene	ND	50	50	56	54	ug/Kg	112	108	3.6	66-142	21	

QCBatchID: QC1213861	Analyst: rvenegas	Method: EPA 6010B
Matrix: Solid	Analyzed: 01/23/2020	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units		RDL	Notes
QC1213861MB1					
Antimony	ND	mg/Kg		3	
Arsenic	ND	mg/Kg		1	
Barium	ND	mg/Kg		1	
Beryllium	ND	mg/Kg		0.5	
Cadmium	ND	mg/Kg		0.5	
Chromium	ND	mg/Kg		1	
Cobalt	ND	mg/Kg		0.5	
Copper	ND	mg/Kg		1	
Lead	ND	mg/Kg		1	
Molybdenum	ND	mg/Kg		1	
Nickel	ND	mg/Kg		1.5	
Selenium	ND	mg/Kg		3	
Silver	ND	mg/Kg		0.5	
Thallium	ND	mg/Kg		3	
Vanadium	ND	mg/Kg		0.5	
Zinc	ND	mg/Kg		5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213861LCS1											
Antimony	100		97.8		mg/Kg	98			80-120		
Arsenic	100		93.8		mg/Kg	94			80-120		
Barium	100		106		mg/Kg	106			80-120		
Beryllium	100		92.7		mg/Kg	93			80-120		
Cadmium	100		103		mg/Kg	103			80-120		
Chromium	100		97.2		mg/Kg	97			80-120		
Cobalt	100		102		mg/Kg	102			80-120		
Copper	100		99.4		mg/Kg	99			80-120		
Lead	100		105		mg/Kg	105			80-120		
Molybdenum	100		104		mg/Kg	104			80-120		
Nickel	100		104		mg/Kg	104			80-120		
Selenium	100		92.3		mg/Kg	92			80-120		
Silver	100		98.6		mg/Kg	99			80-120		
Thallium	100		96.9		mg/Kg	97			80-120		
Vanadium	100		110		mg/Kg	110			80-120		
Zinc	100		101		mg/Kg	101			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213861MS1, QC1213861MSD1												**Source: 423978-005**
Antimony	0.56	100	100	32.0	43.6	mg/Kg	31	43	30.7	75-125	20	M,D
Arsenic	14.3	100	100	87.8	102	mg/Kg	74	88	15.0	75-125	20	M
Barium	165	100	100	227	238	mg/Kg	62	73	4.7	75-125	20	M
Beryllium	ND	100	100	79.5	89.9	mg/Kg	80	90	12.3	75-125	20	
Cadmium	2.27	100	100	79.5	91.9	mg/Kg	77	90	14.5	75-125	20	
Chromium	42.4	100	100	119	131	mg/Kg	77	89	9.6	75-125	20	
Cobalt	13.5	100	100	90.0	100	mg/Kg	77	87	10.5	75-125	20	
Copper	30.0	100	100	109	120	mg/Kg	79	90	9.6	75-125	20	
Lead	7.88	100	100	88.2	102	mg/Kg	80	94	14.5	75-125	20	
Molybdenum	2.12	100	100	78.3	93.9	mg/Kg	76	92	18.1	75-125	20	

QCBatchID:	**QC1213861**	**Analyst:**	rvenegas	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	01/23/2020	**Instrument:**	AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213861MS1, QC1213861MSD1												**Source: 423978-005**
Nickel	37.1	100	100	128	129	mg/Kg	91	92	0.8	75-125	20	
Selenium	ND	100	100	69.6	82.1	mg/Kg	70	82	16.5	75-125	20	M
Silver	ND	100	100	75.7	86.1	mg/Kg	76	86	12.9	75-125	20	
Thallium	1.40	100	100	71.4	86.1	mg/Kg	70	85	18.7	75-125	20	M
Vanadium	89.6	100	100	172	191	mg/Kg	82	101	10.5	75-125	20	
Zinc	71.0	100	100	144	153	mg/Kg	73	82	6.1	75-125	20	M

QCBatchID:	**QC1213864**	**Analyst:**	jbarrios	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	01/23/2020	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units		RDL	Notes
QC1213864MB1					
Mercury	ND	mg/Kg		0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213864LCS1											
Mercury	0.83		0.77		mg/Kg	93			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213864MS1, QC1213864MSD1												**Source: 424016-009**
Mercury	ND	0.83	0.83	0.79	0.89	mg/Kg	95	107	11.9	75-125	20	

QCBatchID:	**QC1213990**	**Analyst:**	TWu	**Method:**	EPA 8015M
Matrix:	Solid	**Analyzed:**	01/28/2020	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units		RDL	Notes
QC1213990MB1					
DRO (C10 to C28)	ND	mg/Kg		10	
GRO (C8 to C10)	ND	mg/Kg		10	
ORO (C28 to C40)	ND	mg/Kg		20	
TPH (C10 to C28)	ND	mg/Kg		10	
TPH (C13 to C22)	ND	mg/Kg		10	
TPH (C13 to C28)	ND	mg/Kg		10	
TPH (C23 to C44)	ND	mg/Kg		20	
TPH (C29 to C40)	ND	mg/Kg		20	
TPH (C6 to C12)	ND	mg/Kg		10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213990LCS1											
TPH (C10 to C28)	250		250		mg/Kg	100			60-133		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1213990MS1, QC1213990MSD1												**Source: 424009-006**
TPH (C10 to C28)	ND	250	250	260	260	mg/Kg	104	104	0.0	70-130	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 423978

Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Matrix: A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Terraphase	Quote #:	
Report To:	CLARE STEEDMAN	Proj. Name:	HAMILTON HS
Email:	clare.steedman@terraphase.com	Proj. #:	5030.008.003
Address:	19401 VON KARMEN AVE	P.O. #:	
	410 IRVINE, CA	Address:	2955 S ROBERTSON BLVD
Phone:	949 337 2227 x 99	Global ID:	-
Fax:		Sampled By:	Wes Shillings

Analysis Request

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	8260B	8015M	T22 METALS 6010/7000	Composite							Test Instructions / Comments
1	DRUM 1	1/21/20	0700	S	2 8oz	N				X							Composite all jars into WASTE-1.21.20
2	DRUM 2	↓	0705	↓	↓	↓				X							
3	DRUM 3	↓	0707	↓	↓	↓				X							
4	DRUM 4	↓	0710	↓	↓	↓				X							
5	WASTE-1.21.20	↓		↓	↓	↓	X	X	X								
6																	
7																	
8																	
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Wes Shillings	TEI / Geologist	1/21/20 1045
1 Received By:	[signature]	FERNANDO DIVA	ES	1/21/20 1045
2 Relinquished By:				
2 Received By:				
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Terraphase

Project: Hamilton H5

Date Received: 01/21/20

Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☐ Yes, How many? _____ ☑ No (skip section 2)

Sample Temp (°C) (No Cooler): 18.2

Sample Temp (°C), One from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☐ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 01/21/20

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	11/26/2018
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**JEL Ref. No.:**	D-1552
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	11/21/2018
Project Name:	Hamilton High School	**Date Analyzed:**	11/21/2018
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No n-pentane, n-hexane, or n-heptane was found in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of sampling.

Approval:

Colby Wakeman
QA/QC Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	11/26/2018
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1552
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	11/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/21/2018
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV55-5.0**	**SV55-15.0**	**SV56-5.0**	**SV56-15.0**	**SV60-5.0**		
Jones ID:	**D-1552-01**	**D-1552-02**	**D-1552-03**	**D-1552-04**	**D-1552-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	**1080**	ND	**296**	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	**50**	ND	**73**	ND	8	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	8	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	10	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	10	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	10	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	10	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	10	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV55-5.0**	**SV55-15.0**	**SV56-5.0**	**SV56-15.0**	**SV60-5.0**		
Jones ID:	**D-1552-01**	**D-1552-02**	**D-1552-03**	**D-1552-04**	**D-1552-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	**1000**	ND	**239**	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	µg/m3
Isopropylbenzene	ND	**38**	ND	**12**	ND	8	µg/m3
4-Isopropyltoluene	ND	**12**	ND	ND	**12**	10	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	**68**	ND	40	µg/m3
n-Propylbenzene	ND	**174**	ND	**59**	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	ND	ND	ND	8	µg/m3
Toluene	**10**	**4590**	ND	**1090**	**12**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	10	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	**755**	ND	**418**	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	**299**	ND	**139**	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	**3840**	ND	**1040**	ND	16	µg/m3
o-Xylene	ND	**1260**	ND	**338**	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	93%	95%	98%	95%	97%	60 - 140	
Toluene-d_8	93%	92%	93%	98%	92%	60 - 140	
4-Bromofluorobenzene	93%	91%	91%	95%	96%	60 - 140	
Batch ID	D1-112118-01	D1-112118-01	D1-112118-01	D1-112118-01	D1-112118-01		

ND= Value less than reporting limit
α = This value processed using

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	11/26/2018
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1552
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	11/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/21/2018
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV60-15.0**	**SV62-5.0**	**SV62-5.0 REP**	**SV62-15.0**	**SV64-20.0**		
Jones ID:	**D-1552-06**	**D-1552-07**	**D-1552-08**	**D-1552-09**	**D-1552-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**26**	ND	ND	**17**	**19**	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	**29**	ND	8	µg/m3
sec-Butylbenzene	ND	ND	ND	**9**	ND	8	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	10	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	10	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	10	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	10	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	10	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	**76**	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV60-15.0**	**SV62-5.0**	**SV62-5.0 REP**	**SV62-15.0**	**SV64-20.0**		
Jones ID:	**D-1552-06**	**D-1552-07**	**D-1552-08**	**D-1552-09**	**D-1552-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	**9**	ND	ND	ND	**92**	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	**11**	**10**	**18**	**17**	10	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	**38**	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	ND	ND	ND	8	µg/m3
Toluene	**70**	ND	ND	**48**	**191**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	10	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	**15**	ND	ND	ND	**144**	8	µg/m3
1,3,5-Trimethylbenzene	**12**	ND	ND	ND	**139**	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	**38**	ND	ND	**21**	**396**	16	µg/m3
o-Xylene	**13**	ND	ND	ND	**128**	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	94%	98%	94%	99%	93%	60 - 140	
Toluene-d_8	93%	93%	96%	95%	93%	60 - 140	
4-Bromofluorobenzene	96%	99%	103%	111%	102%	60 - 140	
Batch ID	D1-112118-01	D1-112118-01	D1-112118-01	D1-112118-01	D1-112118-01		

ND= Value less than reporting limit
α = This value processed using

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	11/26/2018
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1552
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	11/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/21/2018
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV64-30.0**

Jones ID: **D-1552-11**

Analytes:		**Reporting Limit**	**Units**
Benzene	ND	8	µg/m3
Bromobenzene	ND	8	µg/m3
Bromodichloromethane	ND	8	µg/m3
Bromoform	ND	8	µg/m3
n-Butylbenzene	**44**	8	µg/m3
sec-Butylbenzene	ND	8	µg/m3
tert-Butylbenzene	ND	8	µg/m3
Carbon tetrachloride	ND	8	µg/m3
Chlorobenzene	ND	8	µg/m3
Chloroform	**13**	8	µg/m3
2-Chlorotoluene	ND	10	µg/m3
4-Chlorotoluene	ND	10	µg/m3
Dibromochloromethane	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	8	µg/m3
Dibromomethane	ND	8	µg/m3
1,2- Dichlorobenzene	ND	10	µg/m3
1,3-Dichlorobenzene	ND	10	µg/m3
1,4-Dichlorobenzene	ND	10	µg/m3
Dichlorodifluoromethane	ND	8	µg/m3
1,1-Dichloroethane	ND	8	µg/m3
1,2-Dichloroethane	ND	8	µg/m3
1,1-Dichloroethene	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	8	µg/m3
1,2-Dichloropropane	ND	8	µg/m3
1,3-Dichloropropane	ND	8	µg/m3
2,2-Dichloropropane	ND	8	µg/m3
1,1-Dichloropropene	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV64-30.0**

Jones ID: **D-1552-11**

Analytes:		**Reporting Limit**	**Units**
cis-1,3-Dichloropropene	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	8	µg/m3
Ethylbenzene	**118**	8	µg/m3
Freon 113	ND	16	µg/m3
Hexachlorobutadiene	ND	16	µg/m3
Isopropylbenzene	ND	8	µg/m3
4-Isopropyltoluene	**11**	10	µg/m3
Methylene chloride	ND	8	µg/m3
Naphthalene	ND	40	µg/m3
n-Propylbenzene	**44**	8	µg/m3
Styrene	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	8	µg/m3
Tetrachloroethene	ND	8	µg/m3
Toluene	**311**	8	µg/m3
1,2,3-Trichlorobenzene	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	16	µg/m3
1,1,1-Trichloroethane	ND	8	µg/m3
1,1,2-Trichloroethane	ND	8	µg/m3
Trichloroethene	ND	8	µg/m3
Trichlorofluoromethane	ND	10	µg/m3
1,2,3-Trichloropropane	ND	8	µg/m3
1,2,4-Trimethylbenzene	**228**	8	µg/m3
1,3,5-Trimethylbenzene	**112**	8	µg/m3
Vinyl chloride	ND	8	µg/m3
m,p-Xylene	**494**	16	µg/m3
o-Xylene	**145**	8	µg/m3
MTBE	ND	40	µg/m3
Ethyl-tert-butylether	ND	40	µg/m3
Di-isopropylether	ND	40	µg/m3
tert-amylmethylether	ND	40	µg/m3
tert-Butylalcohol	ND	400	µg/m3
Tracer:			
n-Pentane	ND	80	µg/m3
n-Hexane	ND	80	µg/m3
n-Heptane	ND	80	µg/m3

Dilution Factor 1

Surrogate Recoveries:		**QC Limits**
Dibromofluoromethane	96%	60 - 140
Toluene-d_8	93%	60 - 140
4-Bromofluorobenzene	96%	60 - 140

Batch ID D1-112118-01

ND= Value less than reporting limit

α = This value processed using

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering Inc.	**Report date:**	11/26/2018
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1552
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	11/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/21/2018
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**112118-D1MB1**	**112118-D1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	8	µg/m3
Bromobenzene	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	8	µg/m3
Bromoform	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	8	µg/m3
sec-Butylbenzene	ND	ND	8	µg/m3
tert-Butylbenzene	ND	ND	8	µg/m3
Carbon tetrachloride	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	8	µg/m3
Chloroform	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	10	µg/m3
4-Chlorotoluene	ND	ND	10	µg/m3
Dibromochloromethane	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m3
Dibromomethane	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	10	µg/m3
1,3-Dichlorobenzene	ND	ND	10	µg/m3
1,4-Dichlorobenzene	ND	ND	10	µg/m3
Dichlorodifluoromethane	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	10	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**112118-D1MB1**	**112118-D1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	8	µg/m3
Freon 113	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	16	µg/m3
Isopropylbenzene	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	10	µg/m3
Methylene chloride	ND	ND	8	µg/m3
Naphthalene	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	8	µg/m3
Styrene	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	8	µg/m3
Toluene	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	8	µg/m3
Trichloroethene	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	10	µg/m3
1,2,3-Trichloropropane	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	16	µg/m3
o-Xylene	ND	ND	8	µg/m3
MTBE	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	400	µg/m3
Tracer:				
n-Pentane	ND	ND	80	µg/m3
n-Hexane	ND	ND	80	µg/m3
n-Heptane	ND	ND	80	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	88%	96%	60 - 140	
Toluene-d_8	92%	93%	60 - 140	
4-Bromofluorobenzene	94%	91%	60 - 140	
Batch ID	D1-112118-01	D1-112118-01		

ND= Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering Inc.	**Report date:**	11/26/2018
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1552
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	11/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/21/2018
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Batch ID: D1-112118-01

Jones ID:	**112118-D1LCS1**	**112118-D1LCSD1**			**112118-D1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	105%	102%	2.6%	60 - 140	99%	80 - 120
1,1-Dichloroethene	111%	119%	6.7%	60 - 140	136%	80 - 120
Cis-1,2-Dichloroethene	98%	105%	6.6%	70 - 130	114%	80 - 120
1,1,1-Trichloroethane	95%	106%	11.7%	70 - 130	107%	80 - 120
Benzene	115%	118%	2.4%	70 - 130	132%	80 - 120
Trichloroethene	95%	100%	5.3%	70 - 130	111%	80 - 120
Toluene	85%	92%	7.6%	70 - 130	101%	80 - 120
Tetrachloroethene	84%	90%	6.7%	70 - 130	100%	80 - 120
Chlorobenzene	92%	101%	9.3%	70 - 130	104%	80 - 120
Ethylbenzene	88%	96%	8.4%	70 - 130	104%	80 - 120
1,2,4 Trimethylbenzene	98%	96%	2.7%	70 - 130	101%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	96%	100%		60 - 140	96%	60 - 140
Toluene-d_8	94%	96%		60 - 140	95%	60 - 140
4-Bromofluorobenzene	99%	100%		60 - 140	97%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: TERRAPHASE ENGINEERING INC
Project Name: HAMILTON HS
Project Address: 2955 S ROBERTSON BLVD
LOS ANGELES, CA 90034
Email:
Phone: 949-377-2227
Report To: CLARE STEEDMAN
Sampler: JOEL ALMAS

Date: 11/21/2018
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☑ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Helium
- □ 1,1-DFA
- □ ____

Reporting Limits Requested: □ Commercial ☒ Residential
Units: µg/m³

LAB USE ONLY
Jones Project #: D-1552
Page 1 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV55-5.0	3	2510	11/21/18	7:58	8:11	D-1552-01	200	STEVE.1	NEW.1	SG	X				<2	1	
SV55-15.0	3	2680	11/21/18	12:26	12:28	D-1552-02	200	STEVE.1	NEW.1	SG	X				<2	1	
SV56-5.0	3	2510	11/21/18	9:16	9:22	D-1552-03	200	STEVE.1	NEW.2	SG	X				<2	1	
SV56-15.0	3	2680	11/21/18	11:37	11:39	D-1552-04	200	STEVE.2	NEW.1	SG	X				<2	1	
SV60-5.0	3	2510	11/21/18	8:48	8:50	D-1552-05	200	STEVE.1	NEW.1	SG	X				<2	1	
SV60-15.0	3	2680	11/21/18	1:13	1:15	D-1552-06	200	STEVE.1	NEW.2	SG	X				20	1	
SV62-5.0	3	2510	11/21/18	9:00	9:04	D-1552-07	200	STEVE.1	NEW.1	SG	X				<2	1	
SV62-5.0 REP	3	2510	11/21/18	9:50	9:53	D-1552-08	200	STEVE.1	NEW.1	SG	X				<2	1	
SV62-15.0	3	2680	11/21/18	1:34	1:35	D-1552-09	200	STEVE.1	NEW.2	SG	X				<2	1	
SV64-20.0	3	1,110	11/21/18	10:30	10:31	D-1552-10	200	STEVE.1	NEW.1	SG	X				<2	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name
	WES SKILLINGS		JOEL ALMAS
Company	**Date / Time**	**Company**	**Date / Time**
TERRAPHASE	11/21/2018 14:10	JONES ENVIRONMENTAL, INC.	11/21/2018
Relinquished By (Signature)	**Printed Name**	**Received By Laboratory (Signature)**	**Printed Name**
Company	**Date / Time**	**Company**	**Date / Time**

10 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: TERRAPHASE ENGINEERING INC
Date: 11/21/2018
Project Name: HAMILTON HS
Client Project #: S030.008.003
Project Address: 2955 S ROBERTSON BLVD
LOS ANGELES, CA 90034
Email:
Phone: 949-377-2227
Report To: CLARE STEEDMAN
Sampler: JOEL ALMAS

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project # D-1552
Page 2 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Helium
□ 1,1-DFA
□ ____

Reporting Limits Requested
□ Commercial ☒ Residential

Units µg/M³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV64-30.0	3	1280	11/21/18	10:44	10:46	D-1552-11	200	STEVE.2	NEW.2	SG	X				<2	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name		
	WES SKILLINGS		JOEL ALMAS	1	Total Number of Containers
Company	**Date / Time**	**Company**	**Date / Time**		
TERRAPHASE	11/21/2018 1410	JONES ENVIRONMENTAL, INC.	11/21/2018		
Relinquished By (Signature)	**Printed Name**	**Received By Laboratory (Signature)**	**Printed Name**		
Company	**Date / Time**	**Company**	**Date / Time**		

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/18/2019
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	D-1648 S030.008.003
Attn:	Wes Skillings	**Date Sampled:** **Date Received:**	6/14/2019 6/14/2019
Project Name:	Hamilton High School	**Date Analyzed:**	6/14/2019
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then collected.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of sampling.

Approval: Annalise O'Toole

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/18/2019
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1648
		Client Ref. No.:	S030.008.003
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/14/2019
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV04A-5.0**	**SV04A-15.5**	**SV04B-5.0**	**SV04B-5.0 REP**	**SV04B-15.5**		
Jones ID:	**D-1648-01**	**D-1648-02**	**D-1648-03**	**D-1648-04**	**D-1648-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV04A-5.0**	**SV04A-15.5**	**SV04B-5.0**	**SV04B-5.0 REP**	**SV04B-15.5**		
Jones ID:	**D-1648-01**	**D-1648-02**	**D-1648-03**	**D-1648-04**	**D-1648-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	ND	ND	ND	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m3
Tetrachloroethene	**19**	ND	ND	ND	ND	8	µg/m3
Toluene	**53**	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	**26**	ND	ND	ND	ND	16	µg/m3
o-Xylene	**10**	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	100%	102%	104%	102%	100%	60 - 140	
Toluene-d_8	107%	102%	103%	103%	103%	60 - 140	
4-Bromofluorobenzene	95%	91%	93%	96%	94%	60 - 140	
Batch ID:	D1-061419-01	D1-061419-01	D1-061419-01	D1-061419-01	D1-061419-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/18/2019
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1648
		Client Ref. No.:	S030.008.003
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/14/2019
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV04C-5.0**	**SV04C-15.5**	**SV04D-5.0**	**SV04D-15.5**	**SV54-5.0**		
Jones ID:	**D-1648-06**	**D-1648-07**	**D-1648-08**	**D-1648-09**	**D-1648-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV04C-5.0**	**SV04C-15.5**	**SV04D-5.0**	**SV04D-15.5**	**SV54-5.0**		
Jones ID:	**D-1648-06**	**D-1648-07**	**D-1648-08**	**D-1648-09**	**D-1648-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	**12**	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	**27**	ND	ND	**21**	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m3
Tetrachloroethene	**11**	ND	ND	ND	ND	8	µg/m3
Toluene	**61**	**11**	**10**	**18**	**14**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	**11**	**26**	ND	**9**	**16**	8	µg/m3
1,3,5-Trimethylbenzene	ND	**16**	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	**37**	ND	ND	ND	ND	16	µg/m3
o-Xylene	**14**	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	103%	104%	102%	103%	103%	60 - 140	
Toluene-d_8	103%	106%	104%	104%	104%	60 - 140	
4-Bromofluorobenzene	92%	101%	94%	95%	94%	60 - 140	
Batch ID:	D1-061419-01	D1-061419-01	D1-061419-01	D1-061419-01	D1-061419-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/18/2019
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1648
		Client Ref. No.:	S030.008.003
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/14/2019
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV54-15.5**	**SV110-5.0**	**SV110-15.5**	**SV110-15.5 REP**	**SV111-5.0**		
Jones ID:	**D-1648-11**	**D-1648-12**	**D-1648-13**	**D-1648-14**	**D-1648-15**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	**240**	**232**	**18**	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV54-15.5**	**SV110-5.0**	**SV110-15.5**	**SV110-15.5 REP**	**SV111-5.0**		
Jones ID:	**D-1648-11**	**D-1648-12**	**D-1648-13**	**D-1648-14**	**D-1648-15**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	**27**	**509**	**487**	**13**	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	**19**	**19**	ND	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	**45**	**45**	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m3
Tetrachloroethene	ND	ND	ND	ND	ND	8	µg/m3
Toluene	ND	**55**	**2690**	**2540**	**36**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	**29**	**174**	**171**	**23**	8	µg/m3
1,3,5-Trimethylbenzene	ND	**12**	**67**	**65**	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	**173**	**2060**	**1980**	**61**	16	µg/m3
o-Xylene	ND	**70**	**561**	**544**	**24**	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	106%	100%	97%	100%	101%	60 - 140	
Toluene-d_8	101%	100%	102%	101%	103%	60 - 140	
4-Bromofluorobenzene	92%	93%	94%	95%	93%	60 - 140	
Batch ID:	D1-061419-01	D1-061419-01	D1-061419-01	D1-061419-01	D1-061419-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/18/2019
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:**	D-1648
		Client Ref. No.:	S030.008.003
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/14/2019
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV111-15.5**	**SV112-5.0**	**SV112-15.5**		
Jones ID:	**D-1648-16**	**D-1648-17**	**D-1648-18**	**Reporting Limit**	**Units**
Analytes:					
Benzene	ND	**54**	**17**	8	µg/m3
Bromobenzene	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	10	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV111-15.5**	**SV112-5.0**	**SV112-15.5**		
Jones ID:	**D-1648-16**	**D-1648-17**	**D-1648-18**	**Reporting Limit**	**Units**
Analytes:					
cis-1,3-Dichloropropene	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	8	µg/m3
Ethylbenzene	**10**	**12**	ND	8	µg/m3
Freon 113	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	ND	8	µg/m3
Methylene chloride	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	16	µg/m3
Tetrachloroethene	ND	ND	ND	8	µg/m3
Toluene	**9**	**78**	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	**18**	**14**	ND	8	µg/m3
1,3,5-Trimethylbenzene	**9**	**13**	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	8	µg/m3
m,p-Xylene	**66**	**51**	ND	16	µg/m3
o-Xylene	**25**	**16**	ND	8	µg/m3
MTBE	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	400	µg/m3
Tracer:					
n-Pentane	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	80	µg/m3
Dilution Factor	1	1	1		
Surrogate Recoveries:				**QC Limits**	
Dibromofluoromethane	106%	98%	102%	60 - 140	
Toluene-d_8	105%	104%	102%	60 - 140	
4-Bromofluorobenzene	96%	100%	94%	60 - 140	
Batch ID:	D1-061419-01	D1-061419-01	D1-061419-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering Inc.	**Report date:**	6/18/2019
Client Address:	18401 Von Karmen Ave Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	D-1648 S030.008.003
Attn:	Wes Skillings	**Date Sampled:** **Date Received:**	6/14/2019 6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/14/2019
Project Address:	2955 S Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**061419-D1MB1**	**061419-D1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	8	µg/m3
Bromobenzene	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	8	µg/m3
Bromoform	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	8	µg/m3
Chloroform	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m3
Dibromomethane	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	10	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**061419-D1MB1**	**061419-D1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	8	µg/m3
Freon 113	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	8	µg/m3
Methylene chloride	ND	ND	8	µg/m3
Naphthalene	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	8	µg/m3
Styrene	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	16	µg/m3
Tetrachloroethene	ND	ND	8	µg/m3
Toluene	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	8	µg/m3
Trichloroethene	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	16	µg/m3
o-Xylene	ND	ND	8	µg/m3
MTBE	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	400	µg/m3
Tracer:				
n-Pentane	ND	ND	80	µg/m3
n-Hexane	ND	ND	80	µg/m3
n-Heptane	ND	ND	80	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	97%	102%	60 - 140	
Toluene-d_8	106%	106%	60 - 140	
4-Bromofluorobenzene	92%	95%	60 - 140	
Batch ID:	D1-061419-01	D1-061419-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Terraphase Engineering Inc.
Client Address: 18401 Von Karmen Ave, Irvine, CA 92612

Report date: 6/18/2019
Jones Ref. No.: D-1648
Client Ref. No.: S030.008.003

Attn: Wes Skillings

Date Sampled: 6/14/2019
Date Received: 6/14/2019
Date Analyzed: 6/14/2019
Physical State: Soil Gas

Project: Hamilton High School
Project Address: 2955 S Robertson Blvd, Los Angeles, CA 90034

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Batch ID: D1-061419-01

Jones ID:	**061419-D1LCS1**	**061419-D1LCSD1**			**061419-D1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	82%	82%	0.4%	60 - 140	80%	80 - 120
1,1-Dichloroethene	95%	91%	4.3%	60 - 140	105%	80 - 120
Cis-1,2-Dichloroethene	103%	101%	1.9%	70 - 130	96%	80 - 120
1,1,1-Trichloroethane	96%	100%	3.8%	70 - 130	107%	80 - 120
Benzene	101%	98%	2.6%	70 - 130	102%	80 - 120
Trichloroethene	103%	97%	5.8%	70 - 130	106%	80 - 120
Toluene	105%	104%	0.8%	70 - 130	105%	80 - 120
Tetrachloroethene	102%	102%	0.1%	70 - 130	108%	80 - 120
Chlorobenzene	105%	107%	1.8%	70 - 130	109%	80 - 120
Ethylbenzene	108%	109%	0.3%	70 - 130	109%	80 - 120
1,2,4 Trimethylbenzene	109%	113%	3.0%	70 - 130	115%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	30%@	97%		60 - 140	91%	60 - 140
Toluene-d_8	105%	105%		60 - 140	105%	60 - 140
4-Bromofluorobenzene	94%	96%		60 - 140	97%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

@ = Surrogate outside acceptable limits. All other QC parameters in control, therefore data was accepted.

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Soil-Gas Chain-of-Custody Record

Client: Terraphase Engineering Inc.
Project Name: Hamilton High School
Project Address: 2955 S Robertson Blvd
Los Angeles, CA 90034
Email:
Phone:
Report To: Wes Skillings
Sampler: Casey Ellis

Date: 6/14/2019
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project # D-1648
Page 1 of
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Isopropyl Alchohol
□ 1,1-DFA
□ ____

Reporting Limits
☒ Standard □ Low Level* □ MDL*
*surcharge for these limits

Units µg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV04A-5.0	3	1630	6/14/19	8:18	8:19	D-1648-01	200	ANGELA.1	118003	SG	X				<2	1	
SV04A-15.5	3	1800	6/14/19	8:34	8:36	D-1648-02	200	STEVE.2	118040	SG	X				<2	1	
SV04B-5.0	3	1630	6/14/19	8:52	8:53	D-1648-03	200	ANGELA.1	M100.102	SG	X				<2	1	
SV04B-5.0 REP	3	1630	6/14/19	9:00	9:10	D-1648-04	200	ANGELA.1	M100.102	SG	X				<2	1	
SV04B-15.5	3	1,800	6/14/19	9:25	9:27	D-1648-05	200	STEVE.2	M100107	SG	X				<2	1	
SV04C-5.0	3	1630	6/14/19	9:43	9:44	D-1648-06	200	ANGELA.1	118003	SG	X				<2	1	
SV04C-15.5	3	1,800	6/14/19	9:58	10:01	D-1648-07	200	STEVE.2	118040	SG	X				<2	1	
SV04D-5.0	3	1630	6/14/19	10:11	10:19	D-1648-08	200	ANGELA.1	M100.102	SG	X				<2	1	
SV04D-15.5	3	1,800	6/14/19	10:23	10:36	D-1648-09	200	STEVE.2	M100107	SG	X				<2	1	
SV54-5.0	3	1630	6/14/19	10:52	10:53	D-1648-10	200	ANGELA.1	118003	SG	X				<2	1	

Representative Signature	Printed Name	Laboratory Signature	Printed Name		
Wes	Wes Skillings	Casey Ellis	CASEY ELLIS	10	Total Number of Containers
Company	**Date / Time**	**Company**	**Date / Time**		
TERRAPHASE ENGINEERING, INC.	6/14/2019 14:00	JONES ENVIRONMENTAL, INC.	6/14/2019 14:00		
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**		
Company	**Date / Time**	**Company**	**Date / Time**		

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: Terraphase Engineering Inc.
Project Name: Hamilton High School
Project Address: 2955 S Robertson Blvd
Los Angeles, CA 90034
Email:
Phone:
Report To: Wes Skillings
Sampler: Casey Ellis

Date: 6/14/2019
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

LAB USE ONLY
Jones Project # D-1648
Page 2 of
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Reporting Limits
☒ Standard □ Low Level* □ MDL*
*surcharge for these limits

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Isopropyl Alchohol
□ 1,1-DFA
□ _____

Units ug/m3

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV54-15.5	3	1800	6/14/19	11:07	11:11	D-1648-11	200	STEVE.2	118040	SG	X				<2	1	
SV110-5.0	3	1630	6/14/19	11:28	11:30	D-1648-12	200	ANGELA.1	M100.102	SG	X				<2	1	
SV110-15.5	3	1800	6/14/19	11:45	11:47	D-1648-13	200	STEVE.2	M100107	SG	X				<2	1	
SV110-15.5 REP	3	1800	6/14/19	11:50	12:05	D-1648-14	200	STEVE.2	M100107	SG	X				<2	1	
SV111-5.0	3	1,630	6/14/19	12:21	12:22	D-1648-15	200	ANGELA.1	118003	SG	X				<2	1	
SV111-15.5	3	1800	6/14/19	12:39	12:40	D-1648-16	200	STEVE.2	118040	SG	X				<2	1	
SV112-5.0	3	1630	6/14/19	13:00	13:02	D-1648-17	200	ANGELA.1	M100.102	SG	X				<2	1	
SV112-15.5	3	1800	6/14/19	13:13	13:18	D-1648-18	200	STEVE.2	M100107	SG	X				<2	1	

Representative Signature	Printed Name	Laboratory Signature	Printed Name	
	Wes Skillings		CASEY ELLIS	8 Total Number of Containers
Company: TERRAPHASE ENGINEERING, INC.	Date: 6/14/2019 Time: 14:00	Company: JONES ENVIRONMENTAL, INC.	Date: 6/14/2019 Time: 14:00	
Representative Signature	Printed Name	Laboratory Signature	Printed Name	
Company	Date / Time	Company	Date / Time	

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	08/31/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	F-0170 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	08/31/2018 08/31/2018
Project Name:	Hamilton High School	**Date Analyzed:**	08/31/2018
Project Address:	2955 South Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of sampling.

Approval: _____

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	8/31/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0170 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/31/2018 8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	8/31/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV01-5.0'**	**SV01-15.0'**	**SV01-15.0' REP**	**SV22-5.0'**	**SV022-15.0'**		
Jones ID:	**F-0170-01**	**F-0170-02**	**F-0170-03**	**F-0170-04**	**F-0170-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	**9**	ND	ND	**8**	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	**14**	**17**	**17**	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
Dibromochloromethane	**12**	ND	ND	**12**	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV01-5.0'**	**SV01-15.0'**	**SV01-15.0' REP**	**SV22-5.0'**	**SV022-15.0'**		
Jones ID:	**F-0170-01**	**F-0170-02**	**F-0170-03**	**F-0170-04**	**F-0170-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	µg/m3
Isopropylbenzene	**16**	ND	ND	**21**	ND	8	µg/m3
4-Isopropyltoluene	**65**	**28**	**28**	**14**	**8**	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	ND	**25**	**29**	8	µg/m3
Toluene	**33**	**29**	**26**	**22**	**14**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	**15**	**12**	**12**	**8**	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	**9**	ND	**8**	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m3
o-Xylene	ND	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	400	µg/m3
n-Hexane	ND	ND	ND	ND	ND	400	µg/m3
n-Heptane	ND	ND	ND	ND	ND	400	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	102%	108%	102%	103%	101%	60 - 140	
Toluene-d_8	90%	90%	90%	96%	100%	60 - 140	
4-Bromofluorobenzene	88%	79%	87%	90%	87%	60 - 140	
Batch ID	F1-083118-01	F1-083118-01	F1-083118-01	F1-083118-01	F1-083118-01		

ND= Value less than reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	8/31/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0170 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/31/2018 8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	8/31/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV23-5.0'**	**SV23-15.0'**	**SV24-5.0'**	**SV24-15.0'**	**SV05-5.0'**		
Jones ID:	**F-0170-06**	**F-0170-07**	**F-0170-08**	**F-0170-09**	**F-0170-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
Dibromochloromethane	**12**	ND	**10**	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV23-5.0'**	**SV23-15.0'**	**SV24-5.0'**	**SV24-15.0'**	**SV05-5.0'**		
Jones ID:	**F-0170-06**	**F-0170-07**	**F-0170-08**	**F-0170-09**	**F-0170-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	µg/m3
Isopropylbenzene	ND	ND	ND	ND	**21**	8	µg/m3
4-Isopropyltoluene	**10**	ND	ND	ND	**15**	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	**41**	**26**	ND	ND	ND	8	µg/m3
Toluene	**9**	ND	**9**	**9**	**20**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m3
o-Xylene	**8**	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	400	µg/m3
n-Hexane	ND	ND	ND	ND	ND	400	µg/m3
n-Heptane	ND	ND	ND	ND	ND	400	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	105%	102%	103%	100%	104%	60 - 140	
Toluene-d_8	92%	97%	99%	95%	95%	60 - 140	
4-Bromofluorobenzene	87%	86%	86%	85%	90%	60 - 140	
Batch ID	F1-083118-01	F1-083118-01	F1-083118-01	F1-083118-01	F1-083118-01		

ND= Value less than reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	8/31/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0170 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/31/2018 8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	8/31/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV05-15.0'**	**SV59-5.0'**	**SV59-15.0'**	**SV58-5.0'**	**SV58-15.0'**		
Jones ID:	**F-0170-11**	**F-0170-12**	**F-0170-13**	**F-0170-14**	**F-0170-15**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	**19**	**13**	ND	ND	8	µg/m3
Bromoform	ND	**14**	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	**9**	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
Dibromochloromethane	ND	**27**	ND	**15**	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	12	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV05-15.0'**	**SV59-5.0'**	**SV59-15.0'**	**SV58-5.0'**	**SV58-15.0'**		
Jones ID:	**F-0170-11**	**F-0170-12**	**F-0170-13**	**F-0170-14**	**F-0170-15**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	**9**	ND	**9**	ND	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	**12**	ND	ND	**13**	ND	8	µg/m3
Toluene	**11**	**11**	**11**	**9**	**16**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m3
o-Xylene	ND	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	400	µg/m3
n-Hexane	ND	ND	ND	ND	ND	400	µg/m3
n-Heptane	ND	ND	ND	ND	ND	400	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	105%	104%	103%	106%	103%	60 - 140	
Toluene-d_8	96%	95%	94%	90%	95%	60 - 140	
4-Bromofluorobenzene	92%	83%	84%	85%	85%	60 - 140	
Batch ID	F1-083118-01	F1-083118-01	F1-083118-01	F1-083118-01	F1-083118-01		

ND= Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	8/31/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0170 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/31/2018 8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	8/31/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**083118-F1MB1**	**083118-F1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	8	µg/m3
Bromobenzene	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	8	µg/m3
Bromoform	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	8	µg/m3
Chloroform	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	8	µg/m3
Dibromochloromethane	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m3
Dibromomethane	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	12	µg/m3
1,3-Dichlorobenzene	ND	ND	12	µg/m3
1,4-Dichlorobenzene	ND	ND	12	µg/m3
Dichlorodifluoromethane	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	8	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**083118-F1MB1**	**083118-F1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	8	µg/m3
Freon 113	ND	ND	16	µg/m3
Hexachlorobutadiene	ND	ND	16	µg/m3
Isopropylbenzene	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	8	µg/m3
Methylene chloride	ND	ND	8	µg/m3
Naphthalene	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	8	µg/m3
Styrene	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	8	µg/m3
Toluene	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	8	µg/m3
Trichloroethene	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	16	µg/m3
o-Xylene	ND	ND	8	µg/m3
MTBE	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	400	µg/m3
Tracer:				
n-Pentane	ND	ND	400	µg/m3
n-Hexane	ND	ND	400	µg/m3
n-Heptane	ND	ND	400	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	105%	104%	60 - 140	
Toluene-d_8	96%	94%	60 - 140	
4-Bromofluorobenzene	83%	83%	60 - 140	
Batch ID	F1-083118-01	F1-083118-01		

ND= Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	8/31/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0170 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/31/2018 8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	8/31/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Batch ID: F1-083118-01

Jones ID:	**083118-F1LCS1**	**083118-F1LCSD1**			**083118-F1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	91%	86%	6.5%	60 - 140	85%	80 - 120
1,1-Dichloroethene	88%	82%	7.8%	60 - 140	91%	80 - 120
Cis-1,2-Dichloroethene	103%	96%	7.2%	70 - 130	99%	80 - 120
1,1,1-Trichloroethane	107%	100%	6.8%	70 - 130	100%	80 - 120
Benzene	104%	98%	6.3%	70 - 130	99%	80 - 120
Trichloroethene	108%	100%	7.2%	70 - 130	105%	80 - 120
Toluene	105%	97%	8.5%	70 - 130	99%	80 - 120
Tetrachloroethene	115%	106%	8.0%	70 - 130	108%	80 - 120
Chlorobenzene	113%	104%	7.8%	70 - 130	105%	80 - 120
Ethylbenzene	106%	98%	8.4%	70 - 130	102%	80 - 120
1,2,4 Trimethylbenzene	107%	96%	10.1%	70 - 130	104%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	96%	97%		60 - 140	94%	60 - 140
Toluene-d_8	96%	95%		60 - 140	100%	60 - 140
4-Bromofluorobenzene	98%	97%		60 - 140	98%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: TERRAPHASE ENGINEERING
Project Name: HAMILTON HIGH SCHOOL
Project Address: 2955 S ROBERTSON BLVD
LOS ANGELES, CA 90034
Email:
Phone: 213-422-5850
Report To: CLARE STEEDMAN
Sampler: JOEL ALMAS

Date: 8/31/2018
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Helium
□ 1,1-DFA
□ _____

Reporting Limits Requested: □ Commercial □ Residential
Units: _____

LAB USE ONLY
Jones Project #: F-0170
Page 1 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV01-5.0'	3	1630	8/31/18	10:30	10:32	F-0170-01	200	STEVE.1	118009	SG	X				<2	1	
SV01-15.0'	3	1790	8/31/18	10:45	10:46	F-0170-02	200	STEVE.2	118011	SG	X				<2	1	
SV01-15.0' REP	3	1790	8/31/18	10:59	11:05	F-0170-03	200	STEVE.2	118011	SG	X				<2	1	
SV22-5.0'	3	1630	8/31/18	11:16	11:24	F-0170-04	200	STEVE.1	118009	SG	X				<2	1	
SV022-15.0'	3	1790	8/31/18	11:36	11:38	F-0170-05	200	STEVE.2	118011	SG	X				<2	1	
SV23-5.0'	3	1630	8/31/18	11:59	12:00	F-0170-06	200	STEVE.1	118009	SG	X				40	1	
SV23-15.0'	3	1790	8/31/18	12:12	12:14	F-0170-07	200	STEVE.2	118011	SG	X				<2	1	
SV24-5.0'	3	1630	8/31/18	12:33	12:34	F-0170-08	200	STEVE.1	118009	SG	X				<2	1	
SV24-15.0'	3	1790	8/31/18	12:48	12:50	F-0170-09	200	STEVE.2	118011	SG	X				<2	1	
SV05-5.0'	3	1630	8/31/18	11:08	11:09	F-0170-10	200	STEVE.1	118009	SG	X				<2	1	

Relinquished By (Signature): Dan Phelps	Printed Name: DAN PHELPS	Received By (Signature): Joel Almas	Printed Name: JOEL ALMAS
Company: TERRPHASE	Date: 8/31/2018 Time: 1500	Company: JONES ENVIRONMENTAL, INC.	Date: 8/31/2018 Time: 1500
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name
Company	Date Time	Company	Date Time

10 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: TERRAPHASE ENGINEERING
Project Name: HAMILTON HIGH SCHOOL
Project Address: LOS ANGELES, CA 90034
Email:
Phone: 213-422-5850
Report To: CLARE STEEDMAN
Sampler: JOEL ALMAS

Date: 8/31/2018
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P

Shut-In Test: (Y) N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project # F-0170

Page 2 of 2

Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Helium
- □ 1,1-DFA
- □ ____

Reporting Limits Requested: □ Commercial □ Residential

Units: ____

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)				Magnehelic Vacuum (in/H_2O)	Number of Containers	Notes & Special Instructions
SV05-15.0'	3	1790	8/31/18	1:25	1:26	F-0170-11	200	STEVE.2	118011	SG	X				<2	1	
SV59-5.0'	3	1630	8/31/18	1:44	1:46	F-0170-12	200	STEVE.1	118009	SG	X				<2	1	
SV59-15.0'	3	1790	8/31/18	2:01	2:03	F-0170-13	200	STEVE.2	118011	SG	X				<2	1	
SV58-5.0'	3	1630	8/31/18	2:19	2:20	F-0170-14	200	STEVE.1	118009	SG	X				<2	1	
SV58-15.0'	3	1790	8/31/18	2:28	2:39	F-0170-15	200	STEVE.2	118011	SG	X				<2	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name	Total Number of Containers
Dan P	DAN PHELPS	Joel A	JOEL ALMAS	5
Company	**Date / Time**	**Company**	**Date / Time**	
	8/31/18 1500	JONES ENVIRONMENTAL, INC.	8/31/2018 1500	
Relinquished By (Signature)	**Printed Name**	**Received By Laboratory (Signature)**	**Printed Name**	
Company	**Date / Time**	**Company**	**Date / Time**	

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/10/2018
Client Address:	18401 Von Karman Ave #410 Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	F-0173 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/10/2018 9/10/2018
Project Name:	Hamilton High School	**Date Analyzed:**	9/10/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No n-pentane, n-hexane, or n-heptane was found in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of sampling.

Approval:

Colby Wakeman
QA/QC Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/10/2018
Client Address:	18401 Von Karman Ave #410 Irvine, CA 92612	**Jones Ref. No.:**	F-0173
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	9/10/2018
		Date Received:	9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/10/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV57-5.0'**	**SV57-15.0'**	**SV53-5.0'**	**SV53-15.0'**	**SV65-5.0'**		
Jones ID:	**F-0173-01**	**F-0173-02**	**F-0173-03**	**F-0173-04**	**F-0173-05**	**Practical Quantitation Limit**	**Units**
Analytes:							
Benzene	ND	**17**	ND	**15**	**12**	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	**9**	ND	ND	ND	ND	8	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	8	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	**32**	8	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	**10**	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
Dibromochloromethane	ND	ND	ND	ND	**11**	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Dichlorodifluoromethane	ND	ND	ND	**8**	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV57-5.0'**	**SV57-15.0'**	**SV53-5.0'**	**SV53-15.0'**	**SV65-5.0'**		
Jones ID:	**F-0173-01**	**F-0173-02**	**F-0173-03**	**F-0173-04**	**F-0173-05**	**Practical Quantitation Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	40	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	8	µg/m3
Isopropylbenzene	ND	**10**	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	**11**	**10**	ND	ND	**356**	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	**10**	**10**	ND	ND	ND	8	µg/m3
Toluene	**17**	**24**	**14**	**26**	**37**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	**12**	**12**	**10**	**10**	**14**	8	µg/m3
1,3,5-Trimethylbenzene	**9**	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	**20**	**17**	ND	ND	**17**	8	µg/m3
o-Xylene	**10**	**9**	ND	ND	**9**	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	400	µg/m3
n-Hexane	ND	ND	ND	ND	ND	400	µg/m3
n-Heptane	ND	ND	ND	ND	ND	400	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	108%	109%	107%	111%	108%	60 - 140	
Toluene-d_8	96%	96%	96%	95%	95%	60 - 140	
4-Bromofluorobenzene	82%	84%	83%	80%	99%	60 - 140	
	F1-091018-01	F1-091018-01	F1-091018-01	F1-091018-01	F1-091018-01		

ND= Not Detected

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/10/2018
Client Address:	18401 Von Karman Ave #410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0173 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/10/2018 9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/10/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV65-15.0'**	**SV65-15.0' REP**	**SV61-5.0'**	**SV61-15.0'**	**SV02-5.0'**		
Jones ID:	**F-0173-06**	**F-0173-07**	**F-0173-08**	**F-0173-09**	**F-0173-10**	**Practical Quantitation Limit**	**Units**
Analytes:							
Benzene	**8**	**8**	ND	ND	**16**	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	**9**	8	µg/m3
sec-Butylbenzene	**38**	**33**	ND	ND	**10**	8	µg/m3
tert-Butylbenzene	**55**	**46**	ND	ND	**10**	8	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	8	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	**9**	8	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**SV65-15.0'**	**SV65-15.0' REP**	**SV61-5.0'**	**SV61-15.0'**	**SV02-5.0'**		
Jones ID:	**F-0173-06**	**F-0173-07**	**F-0173-08**	**F-0173-09**	**F-0173-10**	**Practical Quantitation Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	ND	40	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	8	µg/m3
Isopropylbenzene	ND	ND	ND	ND	**13**	8	µg/m3
4-Isopropyltoluene	**570**	**496**	**36**	**8**	**16**	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	**9**	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	ND	**13**	**12**	8	µg/m3
Toluene	**14**	**13**	**19**	**11**	**29**	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	**10**	**8**	**14**	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	ND	**23**	8	µg/m3
o-Xylene	ND	ND	ND	ND	**11**	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	400	µg/m3
n-Hexane	ND	ND	ND	ND	ND	400	µg/m3
n-Heptane	ND	ND	ND	ND	ND	400	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	107%	107%	103%	109%	102%	60 - 140	
Toluene-d_8	95%	95%	94%	95%	97%	60 - 140	
4-Bromofluorobenzene	99%	97%	91%	84%	86%	60 - 140	
	F1-091018-01	F1-091018-01	F1-091018-01	F1-091018-01	F1-091018-01		

ND= Not Detected

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/10/2018
Client Address:	18401 Von Karman Ave #410 Irvine, CA 92612	**Jones Ref. No.:**	F-0173
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	9/10/2018
		Date Received:	9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/10/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV02-15.0'**

Jones ID:	**F-0173-11**	**Practical Quantitation Limit**	**Units**
Analytes:			
Benzene	ND	8	µg/m3
Bromobenzene	ND	8	µg/m3
Bromodichloromethane	ND	8	µg/m3
Bromoform	ND	8	µg/m3
n-Butylbenzene	**9**	8	µg/m3
sec-Butylbenzene	ND	8	µg/m3
tert-Butylbenzene	ND	8	µg/m3
Carbon tetrachloride	ND	8	µg/m3
Chlorobenzene	ND	8	µg/m3
Chloroform	ND	8	µg/m3
2-Chlorotoluene	ND	8	µg/m3
4-Chlorotoluene	ND	8	µg/m3
Dibromochloromethane	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	8	µg/m3
Dibromomethane	ND	8	µg/m3
1,2- Dichlorobenzene	ND	8	µg/m3
1,3-Dichlorobenzene	ND	8	µg/m3
1,4-Dichlorobenzene	ND	8	µg/m3
Dichlorodifluoromethane	ND	8	µg/m3
1,1-Dichloroethane	ND	8	µg/m3
1,2-Dichloroethane	ND	8	µg/m3
1,1-Dichloroethene	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	8	µg/m3
1,2-Dichloropropane	ND	8	µg/m3
1,3-Dichloropropane	ND	8	µg/m3
2,2-Dichloropropane	ND	8	µg/m3
1,1-Dichloropropene	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV02-15.0'**

Jones ID:	**F-0173-11**	**Practical Quantitation Limit**	**Units**
Analytes:			
cis-1,3-Dichloropropene	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	8	µg/m3
Ethylbenzene	ND	8	µg/m3
Freon 113	ND	40	µg/m3
Hexachlorobutadiene	ND	8	µg/m3
Isopropylbenzene	ND	8	µg/m3
4-Isopropyltoluene	**9**	8	µg/m3
Methylene chloride	ND	8	µg/m3
Naphthalene	ND	40	µg/m3
n-Propylbenzene	ND	8	µg/m3
Styrene	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	8	µg/m3
Tetrachloroethene	**10**	8	µg/m3
Toluene	**10**	8	µg/m3
1,2,3-Trichlorobenzene	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	16	µg/m3
1,1,1-Trichloroethane	ND	8	µg/m3
1,1,2-Trichloroethane	ND	8	µg/m3
Trichloroethene	ND	8	µg/m3
Trichlorofluoromethane	ND	8	µg/m3
1,2,3-Trichloropropane	ND	8	µg/m3
1,2,4-Trimethylbenzene	**8**	8	µg/m3
1,3,5-Trimethylbenzene	ND	8	µg/m3
Vinyl chloride	ND	8	µg/m3
m,p-Xylene	ND	8	µg/m3
o-Xylene	ND	8	µg/m3
MTBE	ND	40	µg/m3
Ethyl-tert-butylether	ND	40	µg/m3
Di-isopropylether	ND	40	µg/m3
tert-amylmethylether	ND	40	µg/m3
tert-Butylalcohol	ND	400	µg/m3
Tracer:			
n-Pentane	ND	400	µg/m3
n-Hexane	ND	400	µg/m3
n-Heptane	ND	400	µg/m3
Dilution Factor	1		

Surrogate Recoveries:		**QC Limits**
Dibromofluoromethane	110%	60 - 140
Toluene-d_8	95%	60 - 140
4-Bromofluorobenzene	83%	60 - 140

F1-091018-01

ND= Not Detected

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/10/2018
Client Address:	18401 Von Karman Ave #410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0173 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/10/2018 9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/10/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**091018-F1MB1**	**091018-F1SB1**	**Practical Quantitation Limit**	**Units**
Analytes:				
Benzene	ND	ND	8	µg/m3
Bromobenzene	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	8	µg/m3
Bromoform	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	8	µg/m3
sec-Butylbenzene	ND	ND	8	µg/m3
tert-Butylbenzene	ND	ND	8	µg/m3
Carbon tetrachloride	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	8	µg/m3
Chloroform	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	8	µg/m3
Dibromochloromethane	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m3
Dibromomethane	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	8	µg/m3
1,3-Dichlorobenzene	ND	ND	8	µg/m3
1,4-Dichlorobenzene	ND	ND	8	µg/m3
Dichlorodifluoromethane	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	8	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**091018-F1MB1**	**091018-F1SB1**	**Practical Quantitation Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	8	µg/m3
Freon 113	ND	ND	40	µg/m3
Hexachlorobutadiene	ND	ND	8	µg/m3
Isopropylbenzene	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	8	µg/m3
Methylene chloride	ND	ND	8	µg/m3
Naphthalene	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	8	µg/m3
Styrene	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	8	µg/m3
Toluene	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	8	µg/m3
Trichloroethene	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	8	µg/m3
o-Xylene	ND	ND	8	µg/m3
MTBE	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	400	µg/m3
Tracer:				
n-Pentane	ND	ND	400	µg/m3
n-Hexane	ND	ND	400	µg/m3
n-Heptane	ND	ND	400	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	112%	121%	60 - 140	
Toluene-d_8	95%	94%	60 - 140	
4-Bromofluorobenzene	78%	78%	60 - 140	
	F1-091018-01	F1-091018-01		

ND= Not Detected

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/10/2018
Client Address:	18401 Von Karman Ave #410 Irvine, CA 92612	**Jones Ref. No.:**	F-0173
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	9/10/2018
		Date Received:	9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/10/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Batch ID: F1-091018-01

Jones ID:	**091018-F1LCS1**	**091018-F1LCSD1**			**091018-F1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	134%	126%	6.1%	60 - 140	102%	80 - 120
1,1-Dichloroethene	84%	97%	14.1%	60 - 140	97%	80 - 120
Cis-1,2-Dichloroethene	102%	117%	12.9%	70 - 130	106%	80 - 120
1,1,1-Trichloroethane	109%	117%	7.4%	70 - 130	106%	80 - 120
Benzene	108%	113%	4.2%	70 - 130	104%	80 - 120
Trichloroethene	122%	125%	2.3%	70 - 130	111%	80 - 120
Toluene	100%	113%	12.0%	70 - 130	104%	80 - 120
Tetrachloroethene	117%	123%	5.5%	70 - 130	110%	80 - 120
Chlorobenzene	120%	122%	2.0%	70 - 130	112%	80 - 120
Ethylbenzene	111%	113%	1.5%	70 - 130	107%	80 - 120
1,2,4 Trimethylbenzene	99%	111%	11.3%	70 - 130	107%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	96%	99%		60 - 140	95%	60 - 140
Toluene-d_8	87%	95%		60 - 140	101%	60 - 140
4-Bromofluorobenzene	94%	100%		60 - 140	99%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: TERRAPHASE ENGINEERING
Project Name: HAMILTON HIGH SCHOOL
Project Address: 2955 S ROBERTSON BLVD
LOS ANGELES, CA 90034
Email:
Phone: 213-422-5850
Report To: CLARE STEEDMAN
Sampler:

Date: 9/10/2018
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID _____

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Helium
- □ 1,1-DFA
- □ _____

Reporting Limits Requested: □ Commercial ☒ Residential
Units: ug/m³

LAB USE ONLY
Jones Project #: F-0173
Page 1 of 2
Sample Container: GAS TIGHT GLASS SYRINGE
If different than above, see Notes.

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV57-5.0'	3	1630	9/10/18	10:08	10:12	F-0173-01	200	ANGELA.1	M100.112	SG	X				4	1	
SV57-15.0'	3	1790	9/10/18	10:15	10:30	F-0173-02	200	ANNALISE.2	M100.108	SG	X				6	1	
SV53-5.0'	3	1630	9/10/18	11:38	11:42	F-0173-03	200	ANGELA.1	M100.112	SG	X				<2	1	
SV53-15.0'	3	1790	9/10/18	11:18	11:25	F-0173-04	200	ANNALISE.2	M100.108	SG	X				<2	1	
SV65-5.0'	3	1630	9/10/18	11:52	11:59	F-0173-05	200	ANGELA.1	M100.112	SG	X				<2	1	
SV65-15.0'	3	1790	9/10/18	12:07	12:17	F-0173-06	200	ANNALISE.2	M100.108	SG	X				6	1	
SV65-15.0' REP	3	1790	9/10/18	12:28	12:34	F-0173-07	200	ANNALISE.2	M100.108	SG	X				6	1	
SV61-5.0'	3	1630	9/10/18	12:42	12:52	F-0173-08	200	ANGELA.1	M100.112	SG	X				8	1	
SV61-15.0'	3	1790	9/10/18	12:59	13:12	F-0173-09	200	ANNALISE.2	M100.108	SG	X				<2	1	
SV02-5.0'	3	1630	9/10/18	14:29	14:38	F-0173-10	200	ANGELA.1	M100.112	SG	X				6	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name
[signature]	DAN PHELPS	[signature]	Annalise Otero
Company: TET	Date: 9/10/18 Time: 1530	Company: Jones Environmental	Date: 9-10-18 Time:
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name
Company	Date Time	Company	Date Time

10 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: TERRAPHASE ENGINEERING
Project Name: HAMILTON HIGH SCHOOL
Project Address: 2955 S ROBERTSON BLVD
LOS ANGELES, CA 90034
Email:
Phone: 213-422-5850
Report To: CLARE STEEDMAN
Sampler:

Date: 9/10/2018
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

LAB USE ONLY
Jones Project #: F-0173
Page 2 of 2
Sample Container: GAS TIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Helium
□ 1,1-DFA
□ _____

Reporting Limits Requested: □ Commercial ☒ Residential
Units: ug/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV02-15.0'	3	1790	9/10/18	14:39	14:56	F-0173-11	200	ANNALISE.2	M100.108	SG	X				<2	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name
[signature]	DAN PAELPS	[signature]	Annalise O'Toole
Company: TEI	Date: 9/10/18 Time: 1530	Company: Jones Environmental	Date: 9-10-18 Time:
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name
Company	Date Time	Company	Date Time

1 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/19/2018
Client Address:	18401 Von Karman Ave Ste 410 Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	F-0180 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/19/2018 9/19/2018
Project Name:	Hamilton High School	**Date Analyzed:**	9/19/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No n-pentane, n-hexane, or n-heptane was found in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of sampling.

Approval: _____

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/19/2018
Client Address:	18401 Von Karman Ave Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0180 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/19/2018 9/19/2018
Project:	Hamilton High School	**Date Analyzed:**	9/19/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**B4-5'**	**B64-19'**	**B64-29'**	**B64-29' REP**		
Jones ID:	**F-0180-01**	**F-0180-02**	**F-0180-03**	**F-0180-04**	**Practical Quantitation Limit**	**Units**
Analytes:						
Benzene	**9**	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	8	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	8	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	8	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	**10**	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	8	µg/m3
Dibromochloromethane	ND	**11**	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	8	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	8	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	8	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	8	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**B4-5'**	**B64-19'**	**B64-29'**	**B64-29' REP**		
Jones ID:	**F-0180-01**	**F-0180-02**	**F-0180-03**	**F-0180-04**	**Practical Quantitation Limit**	**Units**
Analytes:						
cis-1,3-Dichloropropene	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	**8.54**	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	40	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	8	µg/m3
Isopropylbenzene	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	ND	ND	8	µg/m3
Methylene chloride	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	8	µg/m3
Tetrachloroethene	**343**	**16**	ND	ND	8	µg/m3
Toluene	**24**	**13**	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	**9**	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	**8**	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	**17**	**8**	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	**32**	ND	ND	ND	8	µg/m3
o-Xylene	**12**	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	400	µg/m3
Tracer:						
n-Pentane	ND	ND	ND	ND	400	µg/m3
n-Hexane	ND	ND	ND	ND	400	µg/m3
n-Heptane	ND	ND	ND	ND	400	µg/m3
Dilution Factor	1	1	1	1		
Surrogate Recoveries:					**QC Limits**	
Dibromofluoromethane	105%	111%	111%	112%	60 - 140	
Toluene-d_8	99%	96%	96%	97%	60 - 140	
4-Bromofluorobenzene	81%	83%	82%	82%	60 - 140	
	F1-091918-01	F1-091918-01	F1-091918-01	F1-091918-01		

ND= Not Detected

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/19/2018
Client Address:	18401 Von Karman Ave Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0180 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/19/2018 9/19/2018
Project:	Hamilton High School	**Date Analyzed:**	9/19/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**091918-F1MB1**	**091918-F1SB1**	**Practical Quantitation Limit**	**Units**
Analytes:				
Benzene	ND	ND	8	µg/m3
Bromobenzene	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	8	µg/m3
Bromoform	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	8	µg/m3
sec-Butylbenzene	ND	ND	8	µg/m3
tert-Butylbenzene	ND	ND	8	µg/m3
Carbon tetrachloride	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	8	µg/m3
Chloroform	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	8	µg/m3
4-Chlorotoluene	ND	ND	8	µg/m3
Dibromochloromethane	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m3
Dibromomethane	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	8	µg/m3
1,3-Dichlorobenzene	ND	ND	8	µg/m3
1,4-Dichlorobenzene	ND	ND	8	µg/m3
Dichlorodifluoromethane	ND	ND	8	µg/m3
1,1-Dichloroethane	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	8	µg/m3
1,1-Dichloropropene	ND	ND	8	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**091918-F1MB1**	**091918-F1SB1**	**Practical Quantitation Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	8	µg/m3
Freon 113	ND	ND	40	µg/m3
Hexachlorobutadiene	ND	ND	8	µg/m3
Isopropylbenzene	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	8	µg/m3
Methylene chloride	ND	ND	8	µg/m3
Naphthalene	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	8	µg/m3
Styrene	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	8	µg/m3
Tetrachloroethene	ND	ND	8	µg/m3
Toluene	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	8	µg/m3
Trichloroethene	ND	ND	8	µg/m3
Trichlorofluoromethane	ND	ND	8	µg/m3
1,2,3-Trichloropropane	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	8	µg/m3
o-Xylene	ND	ND	8	µg/m3
MTBE	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	400	µg/m3
Tracer:				
n-Pentane	ND	ND	400	µg/m3
n-Hexane	ND	ND	400	µg/m3
n-Heptane	ND	ND	400	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	110%	110%	60 - 140	
Toluene-d_8	98%	98%	60 - 140	
4-Bromofluorobenzene	87%	81%	60 - 140	
	F1-091918-01	F1-091918-01		

ND= Not Detected

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/19/2018
Client Address:	18401 Von Karman Ave Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	F-0180 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/19/2018 9/19/2018
Project:	Hamilton High School	**Date Analyzed:**	9/19/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Batch ID: F1-091918-01

Jones ID:	**091918-F1LCS1**	**091918-F1LCSD1**			**091918-F1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	138%	137%	0.7%	60 - 140	113%	80 - 120
1,1-Dichloroethene	98%	95%	2.4%	60 - 140	100%	80 - 120
Cis-1,2-Dichloroethene	115%	114%	0.5%	70 - 130	110%	80 - 120
1,1,1-Trichloroethane	114%	116%	1.3%	70 - 130	109%	80 - 120
Benzene	106%	105%	0.5%	70 - 130	101%	80 - 120
Trichloroethene	116%	111%	4.3%	70 - 130	111%	80 - 120
Toluene	108%	106%	1.1%	70 - 130	111%	80 - 120
Tetrachloroethene	110%	108%	1.3%	70 - 130	111%	80 - 120
Chlorobenzene	114%	112%	2.0%	70 - 130	116%	80 - 120
Ethylbenzene	109%	107%	2.1%	70 - 130	113%	80 - 120
1,2,4 Trimethylbenzene	108%	107%	1.4%	70 - 130	113%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	101%	102%		60 - 140	97%	60 - 140
Toluene-d_8	99%	98%		60 - 140	108%	60 - 140
4-Bromofluorobenzene	99%	98%		60 - 140	102%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client
TERRAPHASE ENGINEERING

Project Name
HAMILTON HIGH SCHOOL

Project Address
2955 SOUTH ROBERTSON BLVD

LOS ANGELES, CA 90034

Email

Phone
213-422-5850

Report To
CLARE STEEDMAN

Sampler
JOEL ALMAS

Date
9/19/2018

Client Project #
S030.008.003

Purge Number:
□ 1P ☒ 3P □ 7P □ 10P

Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Helium
□ 1,1-DFA
□ _____

Reporting Limits Requested
□ Commercial ☒ Residential

Units µg/M³

Analysis Requested

LAB USE ONLY
Jones Project #
F-0180

Page 1 of 1

Sample Container:
GAS TIGHT GLASS SYRINGE
If different than above, see Notes.

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
B4-5'	3	1630	9/19/18	10:45	10:50	F-0180-01	200	JOSH.1	118007	SG	X				60	1	LOW FLOW
B64-19'	3	1860	9/19/18	11:16	11:20	F-0180-02	200	ANGELA.2	118012	SG	X				<2	1	
B64-29'	3	1860	9/19/18	11:35	11:37	F-0180-03	200	JOSH.1	118007	SG	X				10	1	
B64-29' REP	3	2030	9/19/18	11:49	11:52	F-0180-04	200	JOSH.1	118007	SG	X				10	1	

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name		
	DAN PHELPS		JOEL ALMAS	4	Total Number of Containers
Company	**Date / Time**	**Company**	**Date / Time**		
TERRAPHASE	9/19/2018 1230	JONES ENVIRONMENTAL	9/19/2018 12:30		
Relinquished By (Signature)	**Printed Name**	**Received By Laboratory (Signature)**	**Printed Name**		
Company	**Date / Time**	**Company**	**Date / Time**		

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	09/04/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	ST-12571 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	08/31/2018 08/31/2018
Project Name:	Hamilton High School	**Date Analyzed:**	09/04/2018
Project Address:	2955 South Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. TO-15 – Volatile Organics by GC/MS

Soil Gas samples were collected in 1-Liter SUMMA Canisters

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the TO-15 analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCVD) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verification Duplicate (CCVD) was analyzed with each batch of Soil Gas samples.

Approval: _____

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/5/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-12571
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	8/31/2018
		Date Received:	8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	9/4/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID: **SV59-15.0'**

Jones ID:	**ST-12571-01**	**Reporting Limit**	**Units**
Analytes:			
Acetone	**28.1**	20.0	µg/m³
Acrolein	ND	2.0	µg/m³
Benzene	**6.4**	2.0	µg/m³
Benzyl chloride	ND	2.0	µg/m³
Bromodichloromethane	ND	2.0	µg/m³
Bromoform	ND	2.0	µg/m³
Bromomethane	ND	2.0	µg/m³
1,3-Butadiene	ND	2.0	µg/m³
2-Butanone (MEK)	ND	2.0	µg/m³
Carbon disulfide	**3.0**	2.0	µg/m³
Carbon tetrachloride	ND	2.0	µg/m³
Chlorobenzene	ND	2.0	µg/m³
Chloroform	ND	2.0	µg/m³
Cyclohexane	ND	2.0	µg/m³
Dibromochloromethane	ND	2.0	µg/m³
1,2-Dibromoethane	ND	2.0	µg/m³
1,2-Dichlorobenzene	ND	2.0	µg/m³
1,3-Dichlorobenzene	ND	2.0	µg/m³
1,4-Dichlorobenzene	ND	2.0	µg/m³
1,1-Dichloroethane	ND	2.0	µg/m³
1,2-Dichloroethane	ND	2.0	µg/m³
1,1-Dichloroethene	ND	2.0	µg/m³
Cis-1,2-Dichloroethene	ND	2.0	µg/m³
Trans-1,2-Dichloroethene	ND	2.0	µg/m³
1,2-Dichloropropane	ND	2.0	µg/m³
Cis-1,3-Dichloropropene	ND	2.0	µg/m³
Trans-1,3-Dichloropropene	ND	2.0	µg/m³
1,4-Dioxane	ND	2.0	µg/m³
Ethanol	ND	20.0	µg/m³

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV59-15.0'**		
Jones ID:	**ST-12571-01**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	**2.1**	2.0	µg/m³
Ethyl benzene	**2.4**	2.0	µg/m³
4-Ethyltoluene	ND	2.0	µg/m³
Freon 11	ND	2.0	µg/m³
Freon 12	ND	2.0	µg/m³
Freon 113	ND	2.0	µg/m³
Freon 114	ND	2.0	µg/m³
Hexachloro-1,3-butadiene	ND	2.0	µg/m³
2-Hexanone (MBK)	ND	2.0	µg/m³
Isopropyl Alcohol	ND	2.0	µg/m³
4-Methyl-2-pentanone (MIBK)	**4.7**	2.0	µg/m³
Methylene chloride	ND	2.0	µg/m³
MTBE	ND	2.0	µg/m³
Methylmethacrylate	ND	2.0	µg/m³
Naphthalene	ND	2.0	µg/m³
Propylene	**33.8**	2.0	µg/m³
Styrene	ND	2.0	µg/m³
1,1,2,2-Tetrachloroethane	ND	2.0	µg/m³
Tetrachloroethene	**2.9**	2.0	µg/m³
Tetrahydrofuran	ND	2.0	µg/m³
Toluene	**5.9**	2.0	µg/m³
1,2,4-Trichlorobenzene	ND	2.0	µg/m³
1,1,1-Trichloroethane	ND	2.0	µg/m³
1,1,2-Trichloroethane	ND	2.0	µg/m³
Trichloroethene	ND	2.0	µg/m³
1,2,4-Trimethylbenzene	**2.7**	2.0	µg/m³
1,3,5-Trimethylbenzene	ND	2.0	µg/m³
Vinyl Acetate	ND	2.0	µg/m³
Vinyl chloride	ND	2.0	µg/m³
o-Xylene	**2.8**	2.0	µg/m³
p/m-Xylene	**6.2**	2.0	µg/m³
Tracer:			
n-pentane	ND	20	µg/m³
n-hexane	ND	20	µg/m³
n-heptane	ND	20	µg/m³
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	101%	60 - 140	
	TO1-090418-01		

ND= Not Detected

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/5/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-12571
		Client Ref. No.:	S030.008.00
Attn:	Clare Steedman	**Date Sampled:**	8/31/2018
		Date Received:	8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	9/4/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**090418-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Acetone	ND	20.0	µg/m³
Acrolein	ND	2.0	µg/m³
Benzene	ND	2.0	µg/m³
Benzyl chloride	ND	2.0	µg/m³
Bromodichloromethane	ND	2.0	µg/m³
Bromoform	ND	2.0	µg/m³
Bromomethane	ND	2.0	µg/m³
1,3-Butadiene	ND	2.0	µg/m³
2-Butanone (MEK)	ND	2.0	µg/m³
Carbon disulfide	ND	2.0	µg/m³
Carbon tetrachloride	ND	2.0	µg/m³
Chlorobenzene	ND	2.0	µg/m³
Chloroform	ND	2.0	µg/m³
Cyclohexane	ND	2.0	µg/m³
Dibromochloromethane	ND	2.0	µg/m³
1,2-Dibromoethane	ND	2.0	µg/m³
1,2-Dichlorobenzene	ND	2.0	µg/m³
1,3-Dichlorobenzene	ND	2.0	µg/m³
1,4-Dichlorobenzene	ND	2.0	µg/m³
1,1-Dichloroethane	ND	2.0	µg/m³
1,2-Dichloroethane	ND	2.0	µg/m³
1,1-Dichloroethene	ND	2.0	µg/m³
Cis-1,2-Dichloroethene	ND	2.0	µg/m³
Trans-1,2-Dichloroethene	ND	2.0	µg/m³
1,2-Dichloropropane	ND	2.0	µg/m³
Cis-1,3-Dichloropropene	ND	2.0	µg/m³
Trans-1,3-Dichloropropene	ND	2.0	µg/m³
1,4-Dioxane	ND	2.0	µg/m³
Ethanol	ND	20	µg/m³

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**090418-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	ND	2.0	µg/m³
Ethyl benzene	ND	2.0	µg/m³
4-Ethyltoluene	ND	2.0	µg/m³
Freon 11	ND	2.0	µg/m³
Freon 12	ND	2.0	µg/m³
Freon 113	ND	2.0	µg/m³
Freon 114	ND	2.0	µg/m³
Heptane	ND	2.0	µg/m³
Hexachloro-1,3-butadiene	ND	2.0	µg/m³
Hexane	ND	2.0	µg/m³
2-Hexanone (MBK)	ND	2.0	µg/m³
Isopropyl Alcohol	ND	2.0	µg/m³
4-Methyl-2-pentanone (MIBK)	ND	2.0	µg/m³
Methylene chloride	ND	2.0	µg/m³
MTBE	ND	2.0	µg/m³
Methylmethacrylate	ND	2.0	µg/m³
Naphthalene	ND	2.0	µg/m³
Propylene	ND	2.0	µg/m³
Styrene	ND	2.0	µg/m³
1,1,2,2-Tetrachloroethane	ND	2.0	µg/m³
Tetrachloroethene	ND	2.0	µg/m³
Tetrahydrofuran	ND	2.0	µg/m³
Toluene	ND	2.0	µg/m³
1,2,4-Trichlorobenzene	ND	2.0	µg/m³
1,1,1-Trichloroethane	ND	2.0	µg/m³
1,1,2-Trichloroethane	ND	2.0	µg/m³
Trichloroethene	ND	2.0	µg/m³
1,2,4-Trimethylbenzene	ND	2.0	µg/m³
1,3,5-Trimethylbenzene	ND	2.0	µg/m³
Vinyl Acetate	ND	2.0	µg/m³
Vinyl chloride	ND	2.0	µg/m³
o-Xylene	ND	2.0	µg/m³
p/m-Xylene	ND	2.0	µg/m³
Tracer:			
n-pentane	ND	20	µg/m³
n-hexane	ND	20	µg/m³
n-heptane	ND	20	µg/m³
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	101%	60 - 140	
	TO1-090418-01		

ND= Not Detected

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QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/5/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-12571 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/31/2018 8/31/2018
Project:	Hamilton High School	**Date Analyzed:**	9/4/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample Spiked: HUMIDIFIED NITROGEN **GC#:** TO1-090418-01

Jones ID:	**090418-TO1CCV1**	**090418-TO1CCVD1**				
Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl Chloride	76%	78%	2.6%	60-140		70-130
1,1-Dichloroethylene	97%	97%	0.2%	60-140		70-130
Cis-1,2-Dichloroethene	81%	79%	2.5%	70-130		70-130
1,1,1-Trichloroethane	90%	87%	4.1%	70-130		70-130
Benzene	106%	102%	3.5%	70-130		70-130
Trichloroethylene	97%	96%	1.2%	70-130		70-130
Toluene	104%	104%	0.2%	70-130		70-130
Tetrachloroethene	124%	119%	4.1%	70-130		70-130
Chlorobenzene	113%	112%	0.7%	70-130		70-130
Ethylbenzene	101%	101%	0.2%	70-130		70-130
1,2,4 Trimethylbenzene	109%	107%	2.4%	70-130		70-130
Surrogate Recovery:						
4-Bromofluorobenzene	100%	100%		60 - 140		60 - 140

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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Soil-Gas Chain of Custody Record

Client: Terraphase
Project Name: Hamilton High School
Project Address:
Email:
Phone:
Report To:
Sampler: Joel Amas

Date: 08/31/18
Client Project #:

Purge Number: □ 1P □ 3P □ 7P □ 10P
Shut-In Test: Y / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID _____

Project #: ST-12571
Page 1 of 1

Lab Use Only
Sample Condition as Recieved:
Sealed □ yes □ no

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Helium
- □ 1,1-DFA
- □ _____

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate	Pump Used	Magnehelic	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas (SG)	TO-15				Magnehelic Vacuum (In/H_2O)	Number of Containers	Remarks & Special Instructions
SV59 - 15.0'	3		08/31	2:10	2:15	ST-12571-01			M100115	X	X					1	Start vac: -30 end: -5

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name	Total Number of Containers
Company	Date: Time:	Company: Jones Env	Date: 08/31/18 Time:	
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name	Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.
Company	Date: Time:	Company	Date: Time:	

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/11/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	ST-12616 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/10/2018 9/10/2018
Project Name:	Hamilton High School	**Date Analyzed:**	9/11/2018
Project Address:	2955 S. Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. TO-15 – Volatile Organics by GC/MS

Soil Gas samples were collected in 1-Liter SUMMA Canisters

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the TO-15 analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCVD) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verification Duplicate (CCVD) was analyzed with each batch of Soil Gas samples.

Approval:

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/11/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-12616
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	9/10/2018
		Date Received:	9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/11/2018
Project Address:	2955 S. Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID: **SV53-5.0'**

Jones ID: **ST-12616-01**

Analytes:		**Reporting Limit**	**Units**
Acetone	**48.5**	10.0	µg/m3
Acrolein	ND	1.0	µg/m3
Benzene	**3.9**	1.0	µg/m3
Benzyl chloride	ND	1.0	µg/m3
Bromodichloromethane	**2.4**	1.0	µg/m3
Bromoform	**2.4**	1.0	µg/m3
Bromomethane	ND	1.0	µg/m3
1,3-Butadiene	ND	1.0	µg/m3
2-Butanone (MEK)	ND	1.0	µg/m3
Carbon disulfide	**3.4**	1.0	µg/m3
Carbon tetrachloride	ND	1.0	µg/m3
Chlorobenzene	ND	1.0	µg/m3
Chloroform	**2.5**	1.0	µg/m3
Cyclohexane	ND	1.0	µg/m3
Dibromochloromethane	**2.5**	1.0	µg/m3
1,2-Dibromoethane	ND	1.0	µg/m3
1,2-Dichlorobenzene	ND	1.0	µg/m3
1,3-Dichlorobenzene	ND	1.0	µg/m3
1,4-Dichlorobenzene	ND	1.0	µg/m3
1,1-Dichloroethane	ND	1.0	µg/m3
1,2-Dichloroethane	ND	1.0	µg/m3
1,1-Dichloroethene	ND	1.0	µg/m3
Cis-1,2-Dichloroethene	ND	1.0	µg/m3
Trans-1,2-Dichloroethene	ND	1.0	µg/m3
1,2-Dichloropropane	ND	1.0	µg/m3
Cis-1,3-Dichloropropene	ND	1.0	µg/m3
Trans-1,3-Dichloropropene	ND	1.0	µg/m3
1,4-Dioxane	ND	1.0	µg/m3
Ethanol	**16.70**	10.0	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15-Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	**SV53-5.0'**		
Jones ID:	**ST-12616-01**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	**3.4**	1.0	µg/m3
Ethylbenzene	**2.7**	1.0	µg/m3
4-Ethyltoluene	**3.4**	1.0	µg/m3
4-Isopropyltoluene	ND	1.0	µg/m3
Freon 11	ND	1.0	µg/m3
Freon 12	ND	1.0	µg/m3
Freon 113	ND	1.0	µg/m3
Freon 114	ND	1.0	µg/m3
Hexachloro-1,3-butadiene	ND	1.0	µg/m3
2-Hexanone (MBK)	ND	1.0	µg/m3
Isopropyl Alcohol	**2.9**	10.0	µg/m3
Isopropylbenzene	ND	1.0	µg/m3
4-Methyl-2-pentanone (MIBK)	**4.7**	1.0	µg/m3
Methylene chloride	ND	1.0	µg/m3
MTBE	ND	1.0	µg/m3
Methylmethacrylate	ND	1.0	µg/m3
Naphthalene	ND	1.0	µg/m3
Propylene	ND	1.0	µg/m3
Styrene	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	1.0	µg/m3
Tetrachloroethene	ND	1.0	µg/m3
Tetrahydrofuran	ND	1.0	µg/m3
Toluene	**6.4**	1.0	µg/m3
1,2,4-Trichlorobenzene	ND	1.0	µg/m3
1,1,1-Trichloroethane	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	1.0	µg/m3
Trichloroethene	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**5.1**	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	1.0	µg/m3
Vinyl Acetate	ND	1.0	µg/m3
Vinyl chloride	ND	1.0	µg/m3
o-Xylene	**3.1**	1.0	µg/m3
m/p-Xylene	**5.5**	2.0	µg/m3
Tracer:			
n-pentane	ND	50.0	µg/m3
n-hexane	ND	50.0	µg/m3
n-heptane	ND	50.0	µg/m3
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	100%	60 - 140	
	TO1-091018-01		

ND = Value below reporting lin

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/11/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-12616
		Client Ref. No.:	S030.008.00
Attn:	Clare Steedman	**Date Sampled:**	9/10/2018
		Date Received:	9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/11/2018
Project Address:	2955 S. Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	**METHOD BLANK**		
Jones ID:	**091018-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Acetone	ND	10.0	µg/m3
Acrolein	ND	1.0	µg/m3
Benzene	ND	1.0	µg/m3
Benzyl chloride	ND	1.0	µg/m3
Bromodichloromethane	ND	1.0	µg/m3
Bromoform	ND	1.0	µg/m3
Bromomethane	ND	1.0	µg/m3
1,3-Butadiene	ND	1.0	µg/m3
2-Butanone (MEK)	ND	1.0	µg/m3
Carbon disulfide	ND	1.0	µg/m3
Carbon tetrachloride	ND	1.0	µg/m3
Chlorobenzene	ND	1.0	µg/m3
Chloroform	ND	1.0	µg/m3
Cyclohexane	ND	1.0	µg/m3
Dibromochloromethane	ND	1.0	µg/m3
1,2-Dibromoethane	ND	1.0	µg/m3
1,2-Dichlorobenzene	ND	1.0	µg/m3
1,3-Dichlorobenzene	ND	1.0	µg/m3
1,4-Dichlorobenzene	ND	1.0	µg/m3
1,1-Dichloroethane	ND	1.0	µg/m3
1,2-Dichloroethane	ND	1.0	µg/m3
1,1-Dichloroethene	ND	1.0	µg/m3
Cis-1,2-Dichloroethene	ND	1.0	µg/m3
Trans-1,2-Dichloroethene	ND	1.0	µg/m3
1,2-Dichloropropane	ND	1.0	µg/m3
Cis-1,3-Dichloropropene	ND	1.0	µg/m3
Trans-1,3-Dichloropropene	ND	1.0	µg/m3
1,4-Dioxane	ND	1.0	µg/m3
Ethanol	ND	10.0	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15-Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	**METHOD BLANK**		
Jones ID:	**091018-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	ND	1.0	µg/m3
Ethyl benzene	ND	1.0	µg/m3
4-Ethyltoluene	ND	1.0	µg/m3
4-Isopropyltoluene	ND	1.0	µg/m3
Freon 11	ND	1.0	µg/m3
Freon 12	ND	1.0	µg/m3
Freon 113	ND	1.0	µg/m3
Freon 114	ND	1.0	µg/m3
Hexachloro-1,3-butadiene	ND	1.0	µg/m3
2-Hexanone (MBK)	ND	1.0	µg/m3
Isopropyl Alcohol	ND	10.0	µg/m3
Isopropylbenzene	ND	1.0	µg/m3
4-Methyl-2-pentanone (MIBK)	ND	1.0	µg/m3
Methylene chloride	ND	1.0	µg/m3
MTBE	ND	1.0	µg/m3
Methylmethacrylate	ND	1.0	µg/m3
Naphthalene	ND	1.0	µg/m3
Propylene	ND	1.0	µg/m3
Styrene	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	1.0	µg/m3
Tetrachloroethene	ND	1.0	µg/m3
Tetrahydrofuran	ND	1.0	µg/m3
Toluene	ND	1.0	µg/m3
1,2,4-Trichlorobenzene	ND	1.0	µg/m3
1,1,1-Trichloroethane	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	1.0	µg/m3
Trichloroethene	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	1.0	µg/m3
Vinyl Acetate	ND	1.0	µg/m3
Vinyl chloride	ND	1.0	µg/m3
o-Xylene	ND	1.0	µg/m3
p/m-Xylene	ND	2.0	µg/m3
Tracer:			
n-pentane	ND	50.0	µg/m3
n-hexane	ND	50.0	µg/m3
n-heptane	ND	50.0	µg/m3
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	102%	60 - 140	
	TO1-091018-01		

ND = Value below reporting lin

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JONES ENVIRONMENTAL
QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/11/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-12616 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/10/2018 9/10/2018
Project:	Hamilton High School	**Date Analyzed:**	9/11/2018
Project Address:	2955 S. Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample Spiked: Ambient Air **GC#:** TO1-091018-01

Jones ID: **091018-TO1CCV1** **18-TO1CCVD1**

Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
Vinyl Chloride	88%	88%	0.0%	70-130
1,1-Dichloroethylene	93%	95%	2.1%	70-130
Cis-1,2-Dichloroethene	87%	84%	3.5%	70-130
1,1,1-Trichloroethane	93%	94%	1.1%	70-130
Benzene	107%	108%	0.9%	70-130
Trichloroethylene	98%	97%	1.0%	70-130
Toluene	103%	104%	1.0%	70-130
Tetrachloroethene	111%	109%	1.8%	70-130
Chlorobenzene	105%	106%	0.9%	70-130
Ethylbenzene	97%	97%	0.0%	70-130
1,2,4 Trimethylbenzene	92%	95%	3.2%	70-130
Surrogate Recovery:				
4-Bromofluorobenzene	102%	102%		60 - 140

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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Soil-Gas Chain of Custody Record

Client: Terraphase Engineering
Date: 9-10-18
Project Name: Hamilton High School
Client Project #: S030.008.003
Project Address: 2955 S. Robertson Blvd. Los Angeles, CA 90034
Email:
Phone:
Report To:
Sampler: Annalise O.

Purge Number: □ 1P □ 3P □ 7P □ 10P
Shut-In Test: Y / N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

Project #: ST-12616
Page 1 of 1

Lab Use Only
Sample Condition as Recieved:
Sealed □ yes □ no

Turn Around Requested:
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
□ Mobile Lab

Tracer:
□ n-pentane
□ n-hexane
□ n-heptane
□ Helium
□ 1,1-DFA
□ _____

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	~~Purge Rate~~ Start vac	~~Pump Used~~ end vac	Magnehelic	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas (SG)	TO-15				Magnehelic Vacuum (In/H_2O)	Number of Containers	Remarks & Special Instructions
SV53-5.0'	-	-	9/10/18	1201	-	ST-12616-01	-30	-5	m100.108	SG	X				<2	1	summa, req: A43
										~~SL~~	~~X~~						

Relinquished By (Signature): Dan Phelps
Printed Name: DAN PHELPS
Company: TEI
Date: 9/10/18
Time: 1530

Received By (Signature): Annalise O'Toole
Printed Name: Annalise O'Toole
Company: Jones Environmental
Date: 9-10-18
Time:

Total Number of Containers: 1

Relinquished By (Signature):
Printed Name:
Company:
Date:
Time:

Received By Laboratory (Signature):
Printed Name:
Company:
Date:
Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/21/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**JEL Ref. No.:**	ST-12676
		Client Ref. No.:	S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	9/19/2018
		Date Received:	9/19/2018
Project Name:	Hamilton High School	**Date Analyzed:**	9/20/2018
Project Address:	2955 South Robertson Blvd. Los Angeles, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA TO-15 – Volatile Organics by GC/MS

Sampling – Soil Gas samples were collected in 1-Liter SUMMA Canisters.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the TO-15 analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except if noted differently on the chain of custody record. Purging was done using a pump set at approximately 200 cc/min, except if noted differently on the chain of custody record. 3 purge volumes were used. (A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.)

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for some length of time. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

Analytical – Soil Gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCV) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verification Duplicate (CCVD) was analyzed with each batch of Soil Gas samples.

Approval:

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/21/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-12676 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/19/2018 9/19/2018
Project:	Hamilton High School	**Date Analyzed:**	9/20/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID: **B64-29'**

Jones ID:	**ST-12676-01**	**Reporting Limit**	**Units**
Analytes:			
Acetone	**47.0**	20.0	µg/m³
Acrolein	ND	2.0	µg/m³
Benzene	**3.1**	2.0	µg/m³
Benzyl chloride	ND	2.0	µg/m³
Bromodichloromethane	**4.6**	2.0	µg/m³
Bromoform	**2.4**	2.0	µg/m³
Bromomethane	ND	2.0	µg/m³
1,3-Butadiene	ND	2.0	µg/m³
2-Butanone (MEK)	**11.9**	2.0	µg/m³
Carbon disulfide	ND	2.0	µg/m³
Carbon tetrachloride	ND	2.0	µg/m³
Chlorobenzene	ND	2.0	µg/m³
Chloroform	**10.7**	2.0	µg/m³
Cyclohexane	ND	2.0	µg/m³
Dibromochloromethane	ND	2.0	µg/m³
1,2-Dibromoethane	ND	2.0	µg/m³
1,2-Dichlorobenzene	ND	2.0	µg/m³
1,3-Dichlorobenzene	ND	2.0	µg/m³
1,4-Dichlorobenzene	ND	2.0	µg/m³
1,1-Dichloroethane	ND	2.0	µg/m³
1,2-Dichloroethane	ND	2.0	µg/m³
1,1-Dichloroethene	ND	2.0	µg/m³
Cis-1,2-Dichloroethene	ND	2.0	µg/m³
Trans-1,2-Dichloroethene	ND	2.0	µg/m³
1,2-Dichloropropane	ND	2.0	µg/m³
Cis-1,3-Dichloropropene	ND	2.0	µg/m³
Trans-1,3-Dichloropropene	ND	2.0	µg/m³
1,4-Dioxane	ND	2.0	µg/m³
Ethanol	**150**	20.0	µg/m³

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**B64-29'**		
Jones ID:	**ST-12676-01**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	**12.4**	2.0	µg/m³
Ethyl benzene	**2.3**	2.0	µg/m³
4-Ethyltoluene	**6.0**	2.0	µg/m³
Freon 11	ND	2.0	µg/m³
Freon 12	**2.5**	2.0	µg/m³
Freon 113	ND	2.0	µg/m³
Freon 114	ND	2.0	µg/m³
Hexachloro-1,3-butadiene	ND	2.0	µg/m³
2-Hexanone (MBK)	**3.7**	2.0	µg/m³
Isopropyl Alcohol	**3.9**	2.0	µg/m³
4-Methyl-2-pentanone (MIBK)	**5.9**	2.0	µg/m³
Methylene chloride	ND	2.0	µg/m³
MTBE	ND	2.0	µg/m³
Methylmethacrylate	ND	2.0	µg/m³
Naphthalene	**4.1**	2.0	µg/m³
Propylene	**35.5**	2.0	µg/m³
Styrene	ND	2.0	µg/m³
1,1,2,2-Tetrachloroethane	ND	2.0	µg/m³
Tetrachloroethene	**5.3**	2.0	µg/m³
Tetrahydrofuran	**2.6**	2.0	µg/m³
Toluene	**4.9**	2.0	µg/m³
1,2,4-Trichlorobenzene	ND	2.0	µg/m³
1,1,1-Trichloroethane	ND	2.0	µg/m³
1,1,2-Trichloroethane	ND	2.0	µg/m³
Trichloroethene	ND	2.0	µg/m³
1,2,4-Trimethylbenzene	**8.3**	2.0	µg/m³
1,3,5-Trimethylbenzene	**3.3**	2.0	µg/m³
Vinyl Acetate	ND	2.0	µg/m³
Vinyl chloride	ND	2.0	µg/m³
o-Xylene	**4.0**	2.0	µg/m³
p/m-Xylene	**7.8**	2.0	µg/m³
Tracer:			
n-pentane	ND	20	µg/m³
n-hexane	ND	20	µg/m³
n-heptane	ND	20	µg/m³
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	101%	60 - 140	
	TO1-092018-01		

ND= Not Detected

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering	**Report date:**	9/21/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-12676 S030.008.003
Attn:	Clare Steedman	**Date Sampled:**	9/19/2018
		Date Received:	9/19/2018
Project:	Hamilton High School	**Date Analyzed:**	9/20/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**092118-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Acetone	ND	20.0	µg/m³
Acrolein	ND	2.0	µg/m³
Benzene	ND	2.0	µg/m³
Benzyl chloride	ND	2.0	µg/m³
Bromodichloromethane	ND	2.0	µg/m³
Bromoform	ND	2.0	µg/m³
Bromomethane	ND	2.0	µg/m³
1,3-Butadiene	ND	2.0	µg/m³
2-Butanone (MEK)	ND	2.0	µg/m³
Carbon disulfide	ND	2.0	µg/m³
Carbon tetrachloride	ND	2.0	µg/m³
Chlorobenzene	ND	2.0	µg/m³
Chloroform	ND	2.0	µg/m³
Cyclohexane	ND	2.0	µg/m³
Dibromochloromethane	ND	2.0	µg/m³
1,2-Dibromoethane	ND	2.0	µg/m³
1,2-Dichlorobenzene	ND	2.0	µg/m³
1,3-Dichlorobenzene	ND	2.0	µg/m³
1,4-Dichlorobenzene	ND	2.0	µg/m³
1,1-Dichloroethane	ND	2.0	µg/m³
1,2-Dichloroethane	ND	2.0	µg/m³
1,1-Dichloroethene	ND	2.0	µg/m³
Cis-1,2-Dichloroethene	ND	2.0	µg/m³
Trans-1,2-Dichloroethene	ND	2.0	µg/m³
1,2-Dichloropropane	ND	2.0	µg/m³
Cis-1,3-Dichloropropene	ND	2.0	µg/m³
Trans-1,3-Dichloropropene	ND	2.0	µg/m³
1,4-Dioxane	ND	2.0	µg/m³
Ethanol	ND	20	µg/m³

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**092118-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	ND	2.0	µg/m³
Ethyl benzene	ND	2.0	µg/m³
4-Ethyltoluene	ND	2.0	µg/m³
Freon 11	ND	2.0	µg/m³
Freon 12	ND	2.0	µg/m³
Freon 113	ND	2.0	µg/m³
Freon 114	ND	2.0	µg/m³
Heptane	ND	2.0	µg/m³
Hexachloro-1,3-butadiene	ND	2.0	µg/m³
Hexane	ND	2.0	µg/m³
2-Hexanone (MBK)	ND	2.0	µg/m³
Isopropyl Alcohol	ND	2.0	µg/m³
4-Methyl-2-pentanone (MIBK)	ND	2.0	µg/m³
Methylene chloride	ND	2.0	µg/m³
MTBE	ND	2.0	µg/m³
Methylmethacrylate	ND	2.0	µg/m³
Naphthalene	ND	2.0	µg/m³
Propylene	ND	2.0	µg/m³
Styrene	ND	2.0	µg/m³
1,1,2,2-Tetrachloroethane	ND	2.0	µg/m³
Tetrachloroethene	ND	2.0	µg/m³
Tetrahydrofuran	ND	2.0	µg/m³
Toluene	ND	2.0	µg/m³
1,2,4-Trichlorobenzene	ND	2.0	µg/m³
1,1,1-Trichloroethane	ND	2.0	µg/m³
1,1,2-Trichloroethane	ND	2.0	µg/m³
Trichloroethene	ND	2.0	µg/m³
1,2,4-Trimethylbenzene	ND	2.0	µg/m³
1,3,5-Trimethylbenzene	ND	2.0	µg/m³
Vinyl Acetate	ND	2.0	µg/m³
Vinyl chloride	ND	2.0	µg/m³
o-Xylene	ND	2.0	µg/m³
p/m-Xylene	ND	2.0	µg/m³
Tracer:			
n-pentane	ND	20	µg/m³
n-hexane	ND	20	µg/m³
n-heptane	ND	20	µg/m³
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	101%	60 - 140	
	TO1-092018-01		

ND= Not Detected

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QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering	**Report date:**	9/21/2018
Client Address:	18401 Von Karman Ave., Suite 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-12676 S030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	9/19/2018 9/19/2018
Project:	Hamilton High School	**Date Analyzed:**	9/20/2018
Project Address:	2955 South Robertson Blvd Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample Spiked: HUMIDIFIED NITROGEN **GC#:** TO1-092018-01

Jones ID:	**092018-TO1CCV1**	**092018-TO1CCVD1**				
Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl Chloride	98%	95%	2.7%	60-140		70-130
1,1-Dichloroethylene	92%	91%	1.3%	60-140		70-130
Cis-1,2-Dichloroethene	101%	104%	2.9%	70-130		70-130
1,1,1-Trichloroethane	102%	108%	5.5%	70-130		70-130
Benzene	111%	117%	4.9%	70-130		70-130
Trichloroethylene	102%	110%	7.5%	70-130		70-130
Toluene	110%	117%	5.5%	70-130		70-130
Tetrachloroethene	111%	118%	6.1%	70-130		70-130
Chlorobenzene	114%	114%	0.4%	70-130		70-130
Ethylbenzene	113%	115%	2.1%	70-130		70-130
1,2,4 Trimethylbenzene	113%	114%	1.4%	70-130		70-130
Surrogate Recovery:						
4-Bromofluorobenzene	100%	101%		60 - 140		60 - 140

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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Soil-Gas Chain of Custody Record

Client: Terraphase Engineering
Project Name: Hamilton High School
Project Address: 2955 south Robertson Blvd Los Angeles CA 90034
Email:
Phone:
Report To: Clare Steedman
Sampler: Joel Almas

Date: 09/19/18
Client Project #: 5030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) N

Report Options: EDD ____ EDF* - 10% Surcharge ____ *Global ID ____

Project #: ST-12676
Page 1 of 1

Lab Use Only
Sample Condition as Recieved:
Sealed □ yes □ no

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Helium
- □ 1,1-DFA
- □ ____

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate	Pump Used	Magnehelic	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas (SG)	TO-15				Magnehelic Vacuum (In/H_2O)	Number of Containers	Remarks & Special Instructions
B64-29'	3	2030	09/19/18	12:05		ST-12676-01	200	Joshi	118012	SG	X					1	

Relinquished By (Signature): [signature] Printed Name: DANIEL G PHELPS
Company: TEI Date: 9/19/18 Time: 1230

Received By (Signature): [signature] Printed Name: JOEL ALMAS
Company: JONES EN Date: 09/19/18 Time: 1230

Total Number of Containers: 1

Relinquished By (Signature): Printed Name:
Company: Date: Time:

Received By Laboratory (Signature): Printed Name:
Company: Date: Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	12/3/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**JEL Ref. No.:** **Client Ref. No.:**	ST-13007 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	11/21/2018 1/21/2018
Project: **Project Address:**	Hamilton High School 2955 South Robertson Boulevard Los Angeles, CA 90034	**Date Analyzed:** **Physical State:**	11/29-11/30/18 Soil Gas

ANALYSES REQUESTED

1. EPA TO-15 – Volatile Organics by GC/MS

Analytical – Indoor Air samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification, QC Reference Standards, and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were analyzed with each batch of Indoor Air samples.

Approval:

Steve Jones, Ph.D.
Laboratory Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	12/3/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-13007 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	11/21/2018 1/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/29-11/30/18
Project Address:	2955 South Robertson Boulevard Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID: **SV60-15.0'**

Jones ID:	**ST-13007-01**	**Reporting Limit**	**Units**
Analytes:			
Acetone	**93.6**	1.0	µg/m³
Acrolein	**8.24**	3.0	µg/m³
Benzene	**24.8**	2.0	µg/m³
Benzyl chloride	ND	3.0	µg/m³
Bromodichloromethane	ND	4.0	µg/m³
Bromoform	ND	6.0	µg/m³
Bromomethane	ND	2.0	µg/m³
1,3-Butadiene	**16.9**	1.0	µg/m³
2-Butanone (MEK)	**46.4**	2.0	µg/m³
Carbon disulfide	**7.54**	2.0	µg/m³
Carbon tetrachloride	ND	3.0	µg/m³
Chlorobenzene	ND	3.0	µg/m³
Chloroform	ND	2.0	µg/m³
Cyclohexane	**21.5**	2.0	µg/m³
Dibromochloromethane	ND	5.0	µg/m³
1,2-Dibromoethane	ND	5.0	µg/m³
1,2-Dichlorobenzene	ND	4.0	µg/m³
1,3-Dichlorobenzene	ND	4.0	µg/m³
1,4-Dichlorobenzene	ND	4.0	µg/m³
1,1-Dichloroethane	ND	2.0	µg/m³
1,2-Dichloroethane	ND	2.0	µg/m³
1,1-Dichloroethene	ND	2.0	µg/m³
Cis-1,2-Dichloroethene	ND	2.0	µg/m³
Trans-1,2-Dichloroethene	ND	2.0	µg/m³
1,2-Dichloropropane	ND	3.0	µg/m³
Cis-1,3-Dichloropropene	ND	3.0	µg/m³
Trans-1,3-Dichloropropene	ND	3.0	µg/m³
1,4-Dioxane	ND	2.0	µg/m³
Ethanol	**176**	12.0	µg/m³

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	**SV60-15.0'**		
Jones ID:	**ST-13007-01**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	**6.36**	2.0	µg/m³
Ethyl benzene	**11.2**	3.0	µg/m³
4-Ethyltoluene	**4.49**	3.0	µg/m³
Freon 11	**3.10**	3.0	µg/m³
Freon 12	**3.28**	3.0	µg/m³
Freon 113	ND	5.0	µg/m³
Freon 114	ND	4.0	µg/m³
Heptane	**32.1**	2.0	µg/m³
Hexachloro-1,3-butadiene	ND	6.0	µg/m³
Hexane	**39.1**	2.0	µg/m³
2-Hexanone (MBK)	**4.84**	2.0	µg/m³
Isopropyl Alcohol	**10.5**	2.0	µg/m³
4-Methyl-2-pentanone (MIBK)	**24.0**	2.0	µg/m³
Methylene chloride	**2.91**	2.0	µg/m³
MTBE	ND	2.0	µg/m³
Methylmethacrylate	ND	2.0	µg/m³
Naphthalene	**7.77**	5.0	µg/m³
Propylene	**700***	1.0	µg/m³
Styrene	ND	3.0	µg/m³
1,1,2,2-Tetrachloroethane	ND	4.0	µg/m³
Tetrachloroethene	**2.06**	2.0	µg/m³
Tetrahydrofuran	ND	2.0	µg/m³
Toluene	**75.0**	2.0	µg/m³
1,2,4-Trichlorobenzene	ND	3.0	µg/m³
1,1,1-Trichloroethane	ND	3.0	µg/m³
1,1,2-Trichloroethane	**9.81**	3.0	µg/m³
Trichloroethene	ND	3.0	µg/m³
1,2,4-Trimethylbenzene	**19.0**	3.0	µg/m³
1,3,5-Trimethylbenzene	**54.2**	3.0	µg/m³
Vinyl Acetate	ND	4.0	µg/m³
Vinyl chloride	ND	2.0	µg/m³
o-Xylene	**14.4**	3.0	µg/m³
p/m-Xylene	**41.9**	3.0	µg/m³
Dilution Factor	1, *1/10		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	100%	60 - 140	
	TO1-112918-IA-CHECKS		

ND= Not Detected

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	12/3/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-13007
		Client Ref. No.:	5030.008.00
Attn:	Clare Steedman	**Date Sampled:**	11/21/2018
		Date Received:	1/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/29-11/30/
Project Address:	2955 South Robertson Boulevard Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	**METHOD BLANK**		
Jones ID:	**112918-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Acetone	ND	1.0	µg/m³
Acrolein	ND	3.0	µg/m³
Benzene	ND	2.0	µg/m³
Benzyl chloride	ND	3.0	µg/m³
Bromodichloromethane	ND	4.0	µg/m³
Bromoform	ND	6.0	µg/m³
Bromomethane	ND	2.0	µg/m³
1,3-Butadiene	ND	1.0	µg/m³
2-Butanone (MEK)	ND	2.0	µg/m³
Carbon disulfide	ND	2.0	µg/m³
Carbon tetrachloride	ND	3.0	µg/m³
Chlorobenzene	ND	3.0	µg/m³
Chloroform	ND	2.0	µg/m³
Cyclohexane	ND	2.0	µg/m³
Dibromochloromethane	ND	5.0	µg/m³
1,2-Dibromoethane	ND	5.0	µg/m³
1,2-Dichlorobenzene	ND	4.0	µg/m³
1,3-Dichlorobenzene	ND	4.0	µg/m³
1,4-Dichlorobenzene	ND	4.0	µg/m³
1,1-Dichloroethane	ND	2.0	µg/m³
1,2-Dichloroethane	ND	2.0	µg/m³
1,1-Dichloroethene	ND	2.0	µg/m³
Cis-1,2-Dichloroethene	ND	2.0	µg/m³
Trans-1,2-Dichloroethene	ND	2.0	µg/m³
1,2-Dichloropropane	ND	3.0	µg/m³
Cis-1,3-Dichloropropene	ND	3.0	µg/m³
Trans-1,3-Dichloropropene	ND	3.0	µg/m³
1,4-Dioxane	ND	2.0	µg/m³
Ethanol	ND	12.0	µg/m³

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	**METHOD BLANK**		
Jones ID:	**112918-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Ethyl acetate	ND	2.0	µg/m³
Ethyl benzene	ND	3.0	µg/m³
4-Ethyltoluene	ND	3.0	µg/m³
Freon 11	ND	3.0	µg/m³
Freon 12	ND	3.0	µg/m³
Freon 113	ND	5.0	µg/m³
Freon 114	ND	4.0	µg/m³
Heptane	ND	2.0	µg/m³
Hexachloro-1,3-butadiene	ND	6.0	µg/m³
Hexane	ND	2.0	µg/m³
2-Hexanone (MBK)	ND	2.0	µg/m³
Isopropyl Alcohol	ND	2.0	µg/m³
4-Methyl-2-pentanone (MIBK)	ND	2.0	µg/m³
Methylene chloride	ND	2.0	µg/m³
MTBE	ND	2.0	µg/m³
Methylmethacrylate	ND	2.0	µg/m³
Naphthalene	ND	5.0	µg/m³
Propylene	ND	1.0	µg/m³
Styrene	ND	3.0	µg/m³
1,1,2,2-Tetrachloroethane	ND	4.0	µg/m³
Tetrachloroethene	ND	2.0	µg/m³
Tetrahydrofuran	ND	2.0	µg/m³
Toluene	ND	2.0	µg/m³
1,2,4-Trichlorobenzene	ND	3.0	µg/m³
1,1,1-Trichloroethane	ND	3.0	µg/m³
1,1,2-Trichloroethane	ND	3.0	µg/m³
Trichloroethene	ND	3.0	µg/m³
1,2,4-Trimethylbenzene	ND	3.0	µg/m³
1,3,5-Trimethylbenzene	ND	3.0	µg/m³
Vinyl Acetate	ND	4.0	µg/m³
Vinyl chloride	ND	2.0	µg/m³
o-Xylene	ND	3.0	µg/m³
p/m-Xylene	ND	3.0	µg/m³
TIC:			
n-propanol	ND	60.0	µg/m³
n-pentane	ND	3.0	µg/m³
x	ND		µg/m³
Dilution Factor	1		
Surrogate Recovery:		**QC Limits**	
4-Bromofluorobenzene	103%	60 - 140	

ND= Not Detected

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JONES ENVIRONMENTAL
QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering Inc.	**Report date:**	12/3/2018
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-13007 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	11/21/2018 1/21/2018
Project:	Hamilton High School	**Date Analyzed:**	11/29-11/30/18
Project Address:	2955 South Robertson Boulevard Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample Spiked: HUMIDIFIED NITROGEN **GC#:** TO1-113018-IA-CHECKS

Jones ID:	**112918-CCV-L4**	**112918-CCVD-L4**		
Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
Vinyl Chloride	93%	96%	3.2%	60-140
1,1-Dichloroethylene	96%	97%	1.0%	60-140
Cis-1,2-Dichloroethene	105%	104%	1.0%	70-130
1,1,1-Trichloroethane	102%	104%	1.9%	70-130
Benzene	108%	108%	0.0%	70-130
Trichloroethylene	102%	103%	1.0%	70-130
Toluene	109%	107%	1.9%	70-130
Tetrachloroethene	99%	97%	2.0%	70-130
Chlorobenzene	106%	105%	0.9%	70-130
Ethylbenzene	112%	113%	0.9%	70-130
1,2,4 Trimethylbenzene	106%	104%	1.9%	70-130
Surrogate Recovery:				
4-Bromofluorobenzene	104%	104%		60 - 140

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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Air Chain-of-Custody Record

Client: Terraphase Engineering Inc
Project Name: Hamilton HS
Project Address: 2955 S Robertson Blvd, Los Angeles, CA 90034
Email:
Phone: 949-377-2227
Report To: Clare Steedman
Sampler: Joel Almas

Date: 11/21/18
Client Project #: S030.008.003

Purge Rate: 200 cc/min
Shut In Test: (Y) / N

Jones Project #: ST-13007
Page: 1

Turn Around Requested:
- [ ] Immediate Attention
- Rush: [ ] 24hr [ ] 48hr [ ] 72hr [ ] 96hr
- [x] Normal

Tracer:
- [x] n-pentane
- [ ] Helium
- [ ] _____

Purge Number:
- [ ] 1 PV
- [x] 3 PV
- [ ] 7 PV
- [ ] 10 PV

Analysis Requested

Sample ID	Date Collected	Purge Number	Purge Volume	Laboratory Sample ID	Canister ID	Canister Start Vacuum	Canister End Vacuum	Flow Rate (cc/min)	Sampling Start Time	Sampling End Time	TO-15	8260B	Magnehelic Reading (in/H_2O)	Number of Containers
SV60-15.0 ~~SV62~~-15.0	11/21/18	3	2680	ST-13007-01	B2423	-30	-5	200	13:17	13:23	X			1

Relinquished By (Signature):	Date: 11.21.18	Recieved By (Signature):	Date: 11/21/18
Company	Time:	Company: Jones Env	Time:
Relinquished By (Signature):	Date:	Recieved By Laboratory (Signature):	Date:
Company	Time:	Company	Time:

The delivery of samples and the signature on this Chain of Custody form constitutes authorization to perform the analyses specificied above under the Terms and Conditions set forth

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/24/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-13880
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/22/2019
Project Address:	2955 S. Robertson Boulevard Los Angels, CA 90034	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA TO-15 – Volatile Organics by GC/MS

Analytical – Soil Gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCV) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verificatio n Duplicate (CCVD) was analyzed with each batch of Soil Gas samples.

Approval:

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering Inc.	**Report date:**	6/24/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-13880
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/22/2019
Project Address:	2955 S. Robertson Boulevard Los Angels, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV04D-15.5**	**SV111-5.0**		
Jones ID:	**ST-13880-01**	**ST-13880-02**	**Reporting Limit**	**Units**
Analytes:				
Acetone	**19.4**	**23.8**	10.0	µg/m3
Acrolein	**1.4**	ND	1.0	µg/m3
Benzene	**6.5**	**14.5**	1.0	µg/m3
Benzyl Chloride	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	1.0	µg/m3
Bromoform	ND	ND	1.0	µg/m3
1,3-Butadiene	ND	ND	1.0	µg/m3
2-Butanone (MEK)	**16.5**	**4.2**	1.0	µg/m3
n-Butylbenzene	**2.1**	ND	1.0	µg/m3
sec-Butylbenzene	ND	ND	1.0	µg/m3
tert-Butylbenzene	**2.5**	**2.9**	1.0	µg/m3
Carbon tetrachloride	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	1.0	µg/m3
Chloroform	ND	**1.5**	1.0	µg/m3
Carbon Disulfide	**41.9**	**13.9**	1.0	µg/m3
Cyclohexane	**1.5**	**2.4**	1.0	µg/m3
Dibromochloromethane	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	1.0	µg/m3
1,4-Dioxane	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	1.0	µg/m3
1,3-Dichlorobenzene	ND	ND	1.0	µg/m3
1,4-Dichlorobenzene	ND	ND	1.0	µg/m3
1,1-Dichloroethane	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	1.0	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV04D-15.5**	**SV111-5.0**		
Jones ID:	**ST-13880-01**	**ST-13880-02**	**Reporting Limit**	**Units**
Analytes:				
Ethyl Acetate	**5.6**	ND	1.0	µg/m3
Ethylbenzene	**6.3**	**9.5**	1.0	µg/m3
4-Ethyltoluene	**16.1**	**12.4**	1.0	µg/m3
Freon 11	**1.4**	**1.0**	1.0	µg/m3
Freon 12	**2.4**	**1.7**	1.0	µg/m3
Freon 113	ND	ND	1.0	µg/m3
Freon 114	ND	ND	1.0	µg/m3
Hexachlorobutadiene	ND	ND	1.0	µg/m3
2-Hexanone (MBK)	ND	ND	1.0	µg/m3
Isopropanol	ND	ND	10.0	µg/m3
Isopropylbenzene	**2.5**	**3.4**	1.0	µg/m3
4-Isopropyltoluene	**2.3**	**4.0**	1.0	µg/m3
4-Methyl-2-pentanone (MIBK)	**4.5**	ND	1.0	µg/m3
Methylene chloride	ND	ND	1.0	µg/m3
Methylmethacrylate	ND	ND	1.0	µg/m3
Naphthalene	ND	ND	5.0	µg/m3
n-Propylbenzene	**2.2**	**2.4**	1.0	µg/m3
Propylene	**3.3**	**142**	1.0	µg/m3
Styrene	**1.2**	**1.7**	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	1.0	µg/m3
Tetrachloroethene	**13.2**	**10.4**	1.0	µg/m3
Toluene	**23.6**	**21.9**	1.0	µg/m3
Tetrahydrofuran	ND	ND	1.0	µg/m3
1,1,1-Trichloroethane	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**16.9**	**20.5**	1.0	µg/m3
1,3,5-Trimethylbenzene	**18.4**	ND	1.0	µg/m3
Vinyl Chloride	ND	ND	1.0	µg/m3
Vinyl Acetate	ND	ND	1.0	µg/m3
m+p-Xylene	**21.5**	**40.1**	2.0	µg/m3
o-Xylene	**8.4**	**16.3**	1.0	µg/m3
MTBE	ND	ND	1.0	µg/m3
Ethyl-tert-butylether	ND	ND	1.0	µg/m3
Di-isopropylether	ND	ND	1.0	µg/m3
tert-amylmethylether	ND	ND	1.0	µg/m3
tert-Butylalcohol	ND	ND	10.0	µg/m3
Tracer:				
n-Pentane	ND	ND	10.0	µg/m3
n-Hexane	ND	ND	10.0	µg/m3
n-Heptane	ND	ND	10.0	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
4-Bromofluorobenzene	99%	99%	60 - 140	
Batch ID:	TO1-062219-IA-CHECKS	TO1-062219-IA-CHECKS		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering Inc.	**Report date:**	6/24/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-13880
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/22/2019
Project Address:	2955 S. Robertson Boulevard Los Angels, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**062219-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Acetone	ND	10	µg/m3
Acrolein	ND	1	µg/m3
Benzene	ND	1	µg/m3
Benzyl Chloride	ND	1	µg/m3
Bromodichloromethane	ND	1	µg/m3
Bromoform	ND	1	µg/m3
1,3-Butadiene	ND	1	µg/m3
2-Butanone (MEK)	ND	1	µg/m3
n-Butylbenzene	ND	1	µg/m3
sec-Butylbenzene	ND	1	µg/m3
tert-Butylbenzene	ND	1	µg/m3
Carbon tetrachloride	ND	1	µg/m3
Chlorobenzene	ND	1	µg/m3
Chloroform	ND	1	µg/m3
Carbon Disulfide	ND	1	µg/m3
Cyclohexane	ND	1	µg/m3
Dibromochloromethane	ND	1	µg/m3
1,2-Dibromo-3-chloropropane	ND	1	µg/m3
1,2-Dibromoethane (EDB)	ND	1	µg/m3
1,4-Dioxane	ND	1	µg/m3
1,2- Dichlorobenzene	ND	1	µg/m3
1,3-Dichlorobenzene	ND	1	µg/m3
1,4-Dichlorobenzene	ND	1	µg/m3
1,1-Dichloroethane	ND	1	µg/m3
1,2-Dichloroethane	ND	1	µg/m3
1,1-Dichloroethene	ND	1	µg/m3
cis-1,2-Dichloroethene	ND	1	µg/m3
trans-1,2-Dichloroethene	ND	1	µg/m3
Ethanol	ND	10	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**062219-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Ethyl Acetate	ND	1	µg/m3
Ethylbenzene	ND	1	µg/m3
Ethylbenzene	ND	1	µg/m3
Freon 11	ND	1	µg/m3
Freon 12	ND	1	µg/m3
Freon 113	ND	1	µg/m3
Freon 114	ND	1	µg/m3
Hexachlorobutadiene	ND	1	µg/m3
2-Hexanone (MBK)	ND	1	µg/m3
Isopropanol	ND	10	µg/m3
Isopropylbenzene	ND	1	µg/m3
4-Isopropyltoluene	ND	1	µg/m3
4-Methyl-2-pentanone (MIBK)	ND	1	µg/m3
Methylene chloride	ND	1	µg/m3
Methylmethacrylate	ND	1	µg/m3
Naphthalene	ND	5	µg/m3
n-Propylbenzene	ND	1	µg/m3
Styrene	ND	1	µg/m3
1,1,1,2-Tetrachloroethane	ND	1	µg/m3
1,1,2,2-Tetrachloroethane	ND	1	µg/m3
Tetrachloroethene	ND	1	µg/m3
Toluene	ND	1	µg/m3
Tetrahydrofuran	ND	1	µg/m3
Propylene	ND	1	µg/m3
1,1,1-Trichloroethane	ND	1	µg/m3
1,1,2-Trichloroethane	ND	1	µg/m3
Trichloroethene	ND	1	µg/m3
1,2,4-Trimethylbenzene	ND	1	µg/m3
1,3,5-Trimethylbenzene	ND	1	µg/m3
Vinyl Chloride	ND	1	µg/m3
Vinyl Acetate	ND	1	µg/m3
m+p-Xylene	ND	2	µg/m3
o-Xylene	ND	1	µg/m3
MTBE	ND	1	µg/m3
Ethyl-tert-butylether	ND	1	µg/m3
Di-isopropylether	ND	1	µg/m3
tert-amylmethylether	ND	1	µg/m3
tert-Butylalcohol	ND	10	µg/m3
Tracer:			
n-Pentane	ND	10	µg/m3
n-Hexane	ND	10	µg/m3
n-Heptane	ND	10	µg/m3
Dilution Factor	1		
Surrogate Recoveries:		**QC Limits**	
4-Bromofluorobenzene	102%	60 - 140	
Batch ID:	TO1-062219-IA-CHECKS		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering Inc.	**Report date:**	6/24/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:**	ST-13880
Attn:	Wes Skillings	**Date Sampled:**	6/14/2019
		Date Received:	6/14/2019
Project:	Hamilton High School	**Date Analyzed:**	6/22/2019
Project Address:	2955 S. Robertson Boulevard Los Angels, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Batch ID: TO1-062219-IA-CHECKS

Jones ID: **062219-TO1CCV1** **062219-TO1CCVD1**

Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
Vinyl chloride	91%	92%	1.1%	70 - 130
1,1-Dichloroethene	86%	90%	4.5%	70 - 130
Cis-1,2-Dichloroethene	81%	88%	8.3%	70 - 130
1,1,1-Trichloroethane	80%	84%	4.9%	70 - 130
Benzene	81%	83%	2.4%	70 - 130
Trichloroethene	81%	83%	2.4%	70 - 130
Toluene	78%	81%	3.8%	70 - 130
Tetrachloroethene	77%	81%	5.1%	70 - 130
Chlorobenzene	75%	79%	5.2%	70 - 130
Ethylbenzene	79%	81%	2.5%	70 - 130
1,2,4 Trimethylbenzene	66%	69%	4.4%	70 - 130
Surrogate Recovery:				
4-Bromofluorobenzene	99%	99%		60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain of Custody Record

Client: Terraphase Engineering Inc
Date: 6/14/2019
Project Name: Hamilton High School
Client Project #:
Project Address: 2955 S Robertson Blvd
Los Angeles, CA 90034
Email:
Phone:
Report To:
Sampler: Casey Ellis

Purge Number: □ 1P ☑ 3P □ 7P □ 10P
Shut-In Test: (Y) / N
Flow Rate: 200
If different than above, see Notes.

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project #: ST-13880
Page 1 of 1
Sample Condition as Recieved: Sealed □ yes □ no
Sample Container:
If different than above, see Notes.

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☑ n-pentane
- ☑ n-hexane
- ☑ n-heptane
- □ Helium
- □ 1,1-DFA
- □ ____

Reporting Limits Requested: □ Commercial □ Residential

Units: ug/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Pump Used	Magnehelic	Laboratory Sample ID	Cannister ID	Cannister Start Pressure	Cannister End Pressure	Sampling Start Time	Sampling End Time	Sample Matrix: Soil Gas (SG), Air (A)	EPA 8260B	EPA TO-15	Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV04D-15.5	3	1800	6/14	Steve.2	M100.107	ST-13880-01	B2443	-30	-4	13:39	13:45	SG		X		1	
SV111-5.0	3	1630	6/14	Angela.1	118003	ST-13880-02	1496	-30	-4	13:23	13:27	SG		X		1	

Total Number of Containers

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name
[signature]	Wes Skillings	[signature]	Casey Ellis
Company: Terraphase Engineering Inc	Date: 6/14/2019 Time:	Company: Jones Environmental, Inc.	Date: 6/14/2019 Time:
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name
Company	Date: Time:	Company	Date: Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

JONES ENVIRONMENTAL, INC.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering, Inc.	**Report date:**	8/21/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-14158 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/14/2019 8/14/2019
Project: **Project Address:**	LAUSD Hamilton High School 2955 S. Robertson Boulevard Los Angeles, CA 90034	**Date Analyzed:** **Physical State:**	8/19/2019 Soil Gas

ANALYSES REQUESTED

1. EPA TO-15 – Volatile Organics by GC/MS

Analytical – Soil Gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCV) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verificatio n Duplicate (CCVD) was analyzed with each batch of Soil Gas samples.

Approval:

Angela Haar, Ph. D.
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering, Inc.	**Report date:**	8/21/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-14158 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/14/2019 8/14/2019
Project: **Project Address:**	LAUSD Hamilton High School 2955 S. Robertson Boulevard Los Angeles, CA 90034	**Date Analyzed:** **Physical State:**	8/19/2019 Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV113-5.0**	**SV113-15.0**	**SV114-5.0**	**SV114-15.0**	**SV115-5.0**		
Jones ID:	**ST-14158-01**	**ST-14158-02**	**ST-14158-03**	**ST-14158-04**	**ST-14158-05**	**Reporting Limit**	**Units**
Analytes:							
Acetone	**108**	**73.3**	**66.9**	**20.9**	**36.9**	10.0	µg/m3
Acrolein	**2.8**	**2.6**	**4.8**	**2.8**	**3.8**	1.0	µg/m3
Benzene	**6.4**	ND	**2.3**	**1.8**	**11.2**	1.0	µg/m3
Benzyl Chloride	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	**12.0**	ND	**5.2**	ND	**13.1**	1.0	µg/m3
Bromoform	**8.5**	ND	**5.8**	ND	**5.2**	1.0	µg/m3
1,3-Butadiene	ND	ND	ND	ND	ND	1.0	µg/m3
2-Butanone (MEK)	**14.7**	**5.7**	**8.3**	**6.1**	**6.2**	1.0	µg/m3
n-Butylbenzene	**4.6**	ND	**2.2**	ND	**8.0**	1.0	µg/m3
sec-Butylbenzene	**1.5**	ND	ND	ND	**1.7**	1.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Chloroform	**6.2**	ND	**3.6**	ND	**8.8**	1.0	µg/m3
Carbon Disulfide	**7.0**	**2.3**	**4.1**	**6.6**	**10.1**	1.0	µg/m3
Cyclohexane	ND	ND	ND	ND	**3.4**	1.0	µg/m3
Dibromochloromethane	**16.6**	ND	**7.9**	ND	**14.3**	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
1,4-Dioxane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	**1.4**	1.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV113-5.0**	**SV113-15.0**	**SV114-5.0**	**SV114-15.0**	**SV115-5.0**		
Jones ID:	**ST-14158-01**	**ST-14158-02**	**ST-14158-03**	**ST-14158-04**	**ST-14158-05**	**Reporting Limit**	**Units**
Analytes:							
Ethyl Acetate	**13.4**	**27.4**	**13.4**	**22.8**	**12.7**	1.0	µg/m3
Ethylbenzene	**12.8**	ND	**7.0**	**11.8**	**76.3**	1.0	µg/m3
4-Ethyltoluene	**17.8**	ND	**4.3**	**3.3**	**21.7**	1.0	µg/m3
Freon 11	**1.6**	**1.4**	**2.4**	**2.2**	**2.6**	1.0	µg/m3
Freon 12	**2.3**	**2.5**	**2.4**	**2.2**	**2.7**	1.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	1.0	µg/m3
Freon 114	ND	ND	ND	ND	ND	1.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	1.0	µg/m3
2-Hexanone (MBK)	**3.9**	**1.2**	**2.5**	**2.9**	**6.8**	1.0	µg/m3
Isopropanol	**3.8**	**2.9**	**2.6**	**1.4**	**1.4**	1.0	µg/m3
Isopropylbenzene	**4.6**	ND	**2.3**	**1.5**	**6.1**	1.0	µg/m3
4-Isopropyltoluene	**237**	**8.4**	**37.1**	**29.3**	**161**	1.0	µg/m3
4-Methyl-2-pentanone (MIBK)	ND	**1.1**	**5.0**	**1.8**	**3.9**	1.0	µg/m3
Methylene chloride	**1.8**	**3.0**	**2.5**	ND	**1.3**	1.0	µg/m3
Methylmethacrylate	ND	ND	ND	ND	ND	1.0	µg/m3
Naphthalene	**5.6**	ND	ND	ND	**30.3**	5.0	µg/m3
n-Propylbenzene	**9.2**	ND	**3.9**	**2.2**	**11.1**	1.0	µg/m3
Propylene	**3.7**	**2.5**	**3.6**	**6.4**	**7.6**	1.0	µg/m3
Styrene	**3.7**	ND	**1.5**	**1.6**	**6.9**	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Tetrachloroethene	**7.4**	**3.4**	**12.6**	**6.3**	**8.7**	1.0	µg/m3
Toluene	**56.3**	**1.4**	**11.4**	**9.0**	**100**	1.0	µg/m3
Tetrahydrofuran	**1.3**	ND	ND	ND	ND	1.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**55.0**	**2.9**	**27.3**	**12.5**	**77.3**	1.0	µg/m3
1,3,5-Trimethylbenzene	**18.1**	ND	**11.0**	**4.6**	**34.6**	1.0	µg/m3
Vinyl Chloride	ND	ND	ND	ND	ND	1.0	µg/m3
Vinyl Acetate	ND	ND	ND	ND	ND	1.0	µg/m3
m+p-Xylene	**50.9**	**1.2**	**54.6**	**60.4**	**354**	2.0	µg/m3
o-Xylene	**16.8**	ND	**18.7**	**18.5**	**132**	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	1.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	1.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	1.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	1.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	10.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	10.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	10.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	10.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
4-Bromofluorobenzene	97%	100%	99%	99%	98%	60 - 140	
Batch ID:	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Terraphase Engineering, Inc.	**Report date:**	8/21/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-14158 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/14/2019 8/14/2019
Project: **Project Address:**	LAUSD Hamilton High School 2955 S. Robertson Boulevard Los Angeles, CA 90034	**Date Analyzed:** **Physical State:**	8/19/2019 Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV115-15.0**	**SV116-5.0**	**SV116-15.0**	**SV116-15.0 REP**		
Jones ID:	**ST-14158-06**	**ST-14158-07**	**ST-14158-08**	**ST-14158-09**	**Reporting Limit**	**Units**
Analytes:						
Acetone	**29.4**	**65.2**	**137**	**34.5**	10.0	µg/m3
Acrolein	**2.2**	ND	**2.0**	**2.4**	1.0	µg/m3
Benzene	**2.2**	**2.7**	**2.0**	**2.1**	1.0	µg/m3
Benzyl Chloride	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	**4.4**	ND	ND	1.0	µg/m3
Bromoform	ND	**4.6**	ND	ND	1.0	µg/m3
1,3-Butadiene	ND	ND	ND	ND	1.0	µg/m3
2-Butanone (MEK)	**5.7**	**6.8**	**4.9**	**7.6**	1.0	µg/m3
n-Butylbenzene	**1.4**	**2.0**	ND	**1.4**	1.0	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	1.0	µg/m3
tert-Butylbenzene	ND	ND	**2.2**	ND	1.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	1.0	µg/m3
Chloroform	ND	**2.1**	ND	ND	1.0	µg/m3
Carbon Disulfide	**5.4**	**2.3**	**4.9**	**6.8**	1.0	µg/m3
Cyclohexane	**1.0**	ND	**1.1**	ND	1.0	µg/m3
Dibromochloromethane	ND	**7.1**	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	1.0	µg/m3
1,4-Dioxane	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	1.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	1.0	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**SV115-15.0**	**SV116-5.0**	**SV116-15.0**	**SV116-15.0 REP**		
Jones ID:	**ST-14158-06**	**ST-14158-07**	**ST-14158-08**	**ST-14158-09**	**Reporting Limit**	**Units**
Analytes:						
Ethyl Acetate	ND	**6.7**	**12.7**	**17.6**	1.0	µg/m3
Ethylbenzene	**16.6**	**8.5**	**4.6**	**3.1**	1.0	µg/m3
4-Ethyltoluene	**2.6**	**4.3**	**2.7**	**1.9**	1.0	µg/m3
Freon 11	**2.4**	**1.6**	**1.5**	**1.8**	1.0	µg/m3
Freon 12	**2.6**	**2.4**	**2.5**	**2.6**	1.0	µg/m3
Freon 113	ND	ND	ND	ND	1.0	µg/m3
Freon 114	ND	ND	ND	ND	1.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	1.0	µg/m3
2-Hexanone (MBK)	**3.2**	**2.0**	**1.3**	ND	1.0	µg/m3
Isopropanol	**2.8**	**2.8**	**3.0**	**1.6**	1.0	µg/m3
Isopropylbenzene	**1.3**	**2.1**	ND	**1.0**	1.0	µg/m3
4-Isopropyltoluene	**13.8**	**69.1**	**14.8**	**20.5**	1.0	µg/m3
4-Methyl-2-pentanone (MIBK)	**2.1**	**3.9**	**1.6**	**1.8**	1.0	µg/m3
Methylene chloride	**1.6**	**2.6**	**3.9**	**1.0**	1.0	µg/m3
Methylmethacrylate	ND	ND	ND	ND	1.0	µg/m3
Naphthalene	ND	ND	**9.5**	ND	5.0	µg/m3
n-Propylbenzene	**1.5**	**3.0**	**2.2**	**1.3**	1.0	µg/m3
Styrene	**1.9**	**1.7**	**1.3**	**1.4**	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	1.0	µg/m3
Tetrachloroethene	**5.3**	**4.4**	**2.4**	**4.0**	1.0	µg/m3
Toluene	**14.0**	**24.2**	**15.7**	**11.2**	1.0	µg/m3
Tetrahydrofuran	ND	ND	ND	ND	1.0	µg/m3
Propylene	**9.8**	**2.4**	**5.9**	**9.3**	1.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**11.4**	**19.1**	**13.2**	**6.8**	1.0	µg/m3
1,3,5-Trimethylbenzene	**3.8**	**7.8**	ND	**2.3**	1.0	µg/m3
Vinyl Chloride	ND	ND	ND	ND	1.0	µg/m3
Vinyl Acetate	ND	ND	ND	ND	1.0	µg/m3
m+p-Xylene	**86.8**	**36.7**	**19.6**	**12.5**	2.0	µg/m3
o-Xylene	**26.5**	**12.5**	**9.2**	**3.8**	1.0	µg/m3
MTBE	ND	ND	ND	ND	1.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	1.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	1.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	1.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	10.0	µg/m3
Tracer:						
n-Pentane	ND	ND	ND	ND	10.0	µg/m3
n-Hexane	ND	ND	ND	ND	10.0	µg/m3
n-Heptane	ND	ND	ND	ND	10.0	µg/m3
Dilution Factor	1	1	1	1		
Surrogate Recoveries:					**QC Limits**	
4-Bromofluorobenzene	100%	99%	99%	99%	60 - 140	
Batch ID:	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS	TO1-081919-IA-CHECKS		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Terraphase Engineering, Inc.	**Report date:**	8/21/2019
Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-14158 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/14/2019 8/14/2019
Project:	LAUSD Hamilton High School	**Date Analyzed:**	8/19/2019
Project Address:	2955 S. Robertson Boulevard Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**081919-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Acetone	ND	10.0	µg/m3
Acrolein	ND	1.0	µg/m3
Benzene	ND	1.0	µg/m3
Benzyl Chloride	ND	1.0	µg/m3
Bromodichloromethane	ND	1.0	µg/m3
Bromoform	ND	1.0	µg/m3
1,3-Butadiene	ND	1.0	µg/m3
2-Butanone (MEK)	ND	1.0	µg/m3
n-Butylbenzene	ND	1.0	µg/m3
sec-Butylbenzene	ND	1.0	µg/m3
tert-Butylbenzene	ND	1.0	µg/m3
Carbon tetrachloride	ND	1.0	µg/m3
Chlorobenzene	ND	1.0	µg/m3
Chloroform	ND	1.0	µg/m3
Carbon Disulfide	ND	1.0	µg/m3
Cyclohexane	ND	1.0	µg/m3
Dibromochloromethane	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	1.0	µg/m3
1,4-Dioxane	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	1.0	µg/m3
1,3-Dichlorobenzene	ND	1.0	µg/m3
1,4-Dichlorobenzene	ND	1.0	µg/m3
1,1-Dichloroethane	ND	1.0	µg/m3
1,2-Dichloroethane	ND	1.0	µg/m3
1,1-Dichloroethene	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	1.0	µg/m3
Ethanol	ND	10.0	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	**METHOD BLANK**		
Jones ID:	**081919-TO1MB1**	**Reporting Limit**	**Units**
Analytes:			
Ethyl Acetate	ND	1.0	µg/m3
Ethylbenzene	ND	1.0	µg/m3
Ethylbenzene	ND	1.0	µg/m3
Freon 11	ND	1.0	µg/m3
Freon 12	ND	1.0	µg/m3
Freon 113	ND	1.0	µg/m3
Freon 114	ND	1.0	µg/m3
Hexachlorobutadiene	ND	1.0	µg/m3
2-Hexanone (MBK)	ND	1.0	µg/m3
Isopropanol	ND	1.0	µg/m3
Isopropylbenzene	ND	1.0	µg/m3
4-Isopropyltoluene	ND	1.0	µg/m3
4-Methyl-2-pentanone (MIBK)	ND	1.0	µg/m3
Methylene chloride	ND	1.0	µg/m3
Methylmethacrylate	ND	1.0	µg/m3
Naphthalene	ND	5.0	µg/m3
n-Propylbenzene	ND	1.0	µg/m3
Styrene	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	1.0	µg/m3
Tetrachloroethene	ND	1.0	µg/m3
Toluene	ND	1.0	µg/m3
Tetrahydrofuran	ND	1.0	µg/m3
Propylene	ND	1.0	µg/m3
1,1,1-Trichloroethane	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	1.0	µg/m3
Trichloroethene	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	1.0	µg/m3
Vinyl Chloride	ND	1.0	µg/m3
Vinyl Acetate	ND	1.0	µg/m3
m+p-Xylene	ND	2.0	µg/m3
o-Xylene	ND	1.0	µg/m3
MTBE	ND	1.0	µg/m3
Ethyl-tert-butylether	ND	1.0	µg/m3
Di-isopropylether	ND	1.0	µg/m3
tert-amylmethylether	ND	1.0	µg/m3
tert-Butylalcohol	ND	10.0	µg/m3
Tracer:			
n-Pentane	ND	10.0	µg/m3
n-Hexane	ND	10.0	µg/m3
n-Heptane	ND	10.0	µg/m3
Dilution Factor	1		
Surrogate Recoveries:		**QC Limits**	
4-Bromofluorobenzene	97%	60 - 140	
Batch ID:	TO1-081919-IA-CHECKS		

ND = Value below reporting limit

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Client Address:	18401 Von Karman Ave, Ste 410 Irvine, CA 92612	**Jones Ref. No.:** **Client Ref. No.:**	ST-14158 5030.008.003
Attn:	Clare Steedman	**Date Sampled:** **Date Received:**	8/14/2019 8/14/2019
Project:	LAUSD Hamilton High School	**Date Analyzed:**	8/19/2019
Project Address:	2955 S. Robertson Boulevard Los Angeles, CA 90034	**Physical State:**	Soil Gas

EPA TO-15 – Volatile Organics by GC/MS

Batch ID: TO1-081919-IA-CHECKS

Jones ID: **081919-TO1CCV** **081919-TO1CCVD**

Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
Vinyl chloride	97%	95%	2.1%	70 - 130
1,1-Dichloroethene	113%	107%	5.5%	70 - 130
Cis-1,2-Dichloroethene	93%	90%	3.3%	70 - 130
1,1,1-Trichloroethane	96%	90%	6.5%	70 - 130
Benzene	97%	91%	6.4%	70 - 130
Trichloroethene	97%	87%	10.9%	70 - 130
Toluene	95%	91%	4.3%	70 - 130
Tetrachloroethene	92%	96%	4.3%	70 - 130
Chlorobenzene	100%	99%	1.0%	70 - 130
Ethylbenzene	100%	99%	1.0%	70 - 130
1,2,4 Trimethylbenzene	115%	112%	2.6%	70 - 130
Surrogate Recovery:				
4-Bromofluorobenzene	96%	96%		60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.jonesenv.com

Soil-Gas Chain of Custody Record

Client: Terraphase Engineering
Project Name: LAUSD Hamilton High School
Project Address: 2955 S. Robertson Blvd. Los Angeles, CA 90034
Email:
Phone:
Report To: Clare Steedman
Sampler: Jackson Nestor

Date: 8/14/19
Client Project #: S030.008.003

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: Y / N
Flow Rate: 200 cc/min
If different than above, see Notes.

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project #: ST-14158
Page 1 of 1
Sample Condition as Recieved: Sealed □ yes □ no
Sample Container:
If different than above, see Notes.

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Helium
- □ 1,1-DFA
- □ ____

Reporting Limits Requested: □ Commercial ☒ Residential

Units: µg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Pump Used	Magnehelic	Laboratory Sample ID	Cannister ID	Cannister Start Pressure	Cannister End Pressure	Sampling Start Time	Sampling End Time	Sample Matrix: Soil Gas (SG), Air (A)	EPA 8260B	EPA TO-15	Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV113-5.0	3	3810	8/14	Jackson	M100.003	ST-14158-01	01201	-30	-4	1134	1140	SG		X	<2	1	
SV113-15.0	3	1440	8/14	Sampler	M100.154	ST-14158-02	01184	-30	-3	1130	1136	SG		X	<2	1	
SV114-5.0	3	3810	8/14	Sampler	118008	ST-14158-03	B2417	-30	-4	1207	1214	SG		X	<2	1	
SV114-15.0	3	1440	8/14	Jackson	M100.003	ST-14158-04	01180	-30	-2	1156	1204	SG		X	<2	1	
SV115-5.0	3	3810	8/14	Jackson	M100.154	ST-14158-05	B2438	-28	-3	1219	1224	SG		X	<2	1	
SV115-15.0	3	1440	8/14	Sampler	118008	ST-14158-06	1513B	-30	-3	1221	1229	SG		X	<2	1	
SV116-5.0	3	3810	8/14	Jackson	M100.003	ST-14158-07	1489	-30	-2	1301	1309	SG		X	<2	1	
SV116-15.0	3	1440	8/14	Sampler	M100.154	ST-14158-08	01156	-30	-3	1248	1255	SG		X	<2	1	
SV116-15.0 REP	3	1440	8/14	Sampler	M100.154	ST-14158-09	01220	-30	-4	1257	1303	SG		X	<2	1	

Total Number of Containers

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name
	West Skillman		Jackson Nestor
Company	Date: Time:	Company: Jones Env.	Date: 8/14/19 Time: 1315
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name
Company	Date: Time:	Company	Date: Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

H&P Mobile Geochemistry Inc.

12 December 2019

Clare Steedman
Terraphase Engineering - Irvine
18401 Von Karman Avenue, Suite 410
Irvine, CA 92612

H&P Project: TP112619-11
Client Project: 5030.008.003 / 2955 S. Robertson Blvd.

Dear Clare Steedman:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 11/25/2019-11/26/2019which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis La Roux
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV117-25	E911113-01	Vapor	25-Nov-19	25-Nov-19
SV117-15	E911113-02	Vapor	25-Nov-19	25-Nov-19
SV118-25	E911113-03	Vapor	25-Nov-19	25-Nov-19
SV118-25-Rep	E911113-04	Vapor	25-Nov-19	25-Nov-19
SV118-15	E911113-05	Vapor	25-Nov-19	25-Nov-19
SV118-10	E911113-06	Vapor	25-Nov-19	25-Nov-19
SV119-25	E911113-07	Vapor	25-Nov-19	25-Nov-19
SV119-15	E911113-08	Vapor	25-Nov-19	25-Nov-19
SV119-10	E911113-09	Vapor	25-Nov-19	25-Nov-19
SV120-25	E911113-10	Vapor	25-Nov-19	25-Nov-19
SV120-15	E911113-11	Vapor	25-Nov-19	25-Nov-19
SV120-10	E911113-12	Vapor	25-Nov-19	25-Nov-19
SV121-25	E911113-13	Vapor	25-Nov-19	25-Nov-19
SV121-15	E911113-14	Vapor	25-Nov-19	25-Nov-19
SV121-10	E911113-15	Vapor	25-Nov-19	25-Nov-19
SV122-25	E911113-16	Vapor	25-Nov-19	25-Nov-19
SV122-15	E911113-17	Vapor	25-Nov-19	25-Nov-19
SV122-10	E911113-18	Vapor	25-Nov-19	25-Nov-19
SV117-5	E911113-19	Vapor	25-Nov-19	25-Nov-19
SV117-10	E911113-20	Vapor	25-Nov-19	25-Nov-19
SV118-5	E911115-01	Vapor	26-Nov-19	26-Nov-19
SV118-5-Rep	E911115-02	Vapor	26-Nov-19	26-Nov-19
SV119-5	E911115-03	Vapor	26-Nov-19	26-Nov-19
SV120-5	E911115-04	Vapor	26-Nov-19	26-Nov-19
SV121-5	E911115-05	Vapor	26-Nov-19	26-Nov-19
SV122-5	E911115-06	Vapor	26-Nov-19	26-Nov-19
SV122-5-Rep	E911115-07	Vapor	26-Nov-19	26-Nov-19

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DETECTIONS SUMMARY

Sample ID: **SV117-25** Laboratory ID: **E911113-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**20**	7.1	ug/m3	EPA TO-15	B
Carbon disulfide	**25**	13	ug/m3	EPA TO-15	
Benzene	**160**	6.5	ug/m3	EPA TO-15	
Toluene	**4600**	19	ug/m3	EPA TO-15	
Tetrachloroethene	**33**	14	ug/m3	EPA TO-15	
Ethylbenzene	**1300**	8.8	ug/m3	EPA TO-15	
m,p-Xylene	**5400**	18	ug/m3	EPA TO-15	
o-Xylene	**1500**	8.8	ug/m3	EPA TO-15	
4-Ethyltoluene	**510**	10	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**630**	10	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**1800**	10	ug/m3	EPA TO-15	

Sample ID: **SV117-15** Laboratory ID: **E911113-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**19**	7.1	ug/m3	EPA TO-15	B
Benzene	**130**	6.5	ug/m3	EPA TO-15	
Toluene	**3400**	7.6	ug/m3	EPA TO-15	
Tetrachloroethene	**73**	14	ug/m3	EPA TO-15	
Ethylbenzene	**1300**	8.8	ug/m3	EPA TO-15	
m,p-Xylene	**5000**	18	ug/m3	EPA TO-15	
o-Xylene	**1600**	8.8	ug/m3	EPA TO-15	
4-Ethyltoluene	**500**	10	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**580**	10	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**1800**	10	ug/m3	EPA TO-15	

Sample ID: **SV118-25** Laboratory ID: **E911113-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**11**	3.5	ug/m3	EPA TO-15	B
Chloroform	**9.5**	4.9	ug/m3	EPA TO-15	
Toluene	**7.1**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**10**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**9.3**	8.8	ug/m3	EPA TO-15	

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Sample ID: **SV118-25-Rep** Laboratory ID: **E911113-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**11**	3.5	ug/m3	EPA TO-15	B
Chloroform	**9.5**	4.9	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**13**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**15**	8.8	ug/m3	EPA TO-15	
o-Xylene	**4.7**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**7.0**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV118-15** Laboratory ID: **E911113-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**9.9**	3.5	ug/m3	EPA TO-15	B
Toluene	**17**	3.8	ug/m3	EPA TO-15	
Ethylbenzene	**4.8**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**17**	8.8	ug/m3	EPA TO-15	
o-Xylene	**6.3**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**9.0**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV118-10** Laboratory ID: **E911113-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Toluene	**14**	3.8	ug/m3	EPA TO-15	
m,p-Xylene	**15**	8.8	ug/m3	EPA TO-15	
o-Xylene	**5.4**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**8.5**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV119-25** Laboratory ID: **E911113-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**9.9**	3.5	ug/m3	EPA TO-15	B
Chloroform	**9.1**	4.9	ug/m3	EPA TO-15	
Toluene	**5.2**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**13**	6.9	ug/m3	EPA TO-15	

Sample ID: **SV119-15** Laboratory ID: **E911113-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**5.2**	2.1	ug/m3	EPA TO-15	

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Sample ID: **SV119-15** Laboratory ID: **E911113-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**11**	3.5	ug/m3	EPA TO-15	B
Carbon disulfide	**18**	6.3	ug/m3	EPA TO-15	
Benzene	**13**	3.2	ug/m3	EPA TO-15	
Toluene	**43**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**8.2**	6.9	ug/m3	EPA TO-15	
Ethylbenzene	**7.8**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**25**	8.8	ug/m3	EPA TO-15	
o-Xylene	**8.7**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**11**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV119-10** Laboratory ID: **E911113-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**9.2**	3.5	ug/m3	EPA TO-15	B
2-Butanone (MEK)	**40**	30	ug/m3	EPA TO-15	
Toluene	**12**	3.8	ug/m3	EPA TO-15	
m,p-Xylene	**9.5**	8.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**5.4**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV120-25** Laboratory ID: **E911113-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Toluene	**9.0**	3.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**8.8**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV120-15** Laboratory ID: **E911113-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Benzene	**8.3**	3.2	ug/m3	EPA TO-15	
Toluene	**87**	3.8	ug/m3	EPA TO-15	
Ethylbenzene	**31**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**140**	8.8	ug/m3	EPA TO-15	
o-Xylene	**57**	4.4	ug/m3	EPA TO-15	
4-Ethyltoluene	**12**	5.0	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**14**	5.0	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**49**	5.0	ug/m3	EPA TO-15	

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Sample ID: **SV120-10** Laboratory ID: **E911113-12**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1,2-Trichlorotrifluoroethane (F113)	**10**	7.7	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**9.9**	3.5	ug/m3	EPA TO-15	B
Chloroform	**5.2**	4.9	ug/m3	EPA TO-15	
Benzene	**3.5**	3.2	ug/m3	EPA TO-15	
Toluene	**6.4**	3.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**7.8**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV121-25** Laboratory ID: **E911113-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Toluene	**3.9**	3.8	ug/m3	EPA TO-15	

Sample ID: **SV121-15** Laboratory ID: **E911113-14**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Benzene	**38**	3.2	ug/m3	EPA TO-15	
Toluene	**140**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**7.4**	6.9	ug/m3	EPA TO-15	
Ethylbenzene	**21**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**73**	8.8	ug/m3	EPA TO-15	
o-Xylene	**22**	4.4	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**5.9**	5.0	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**18**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV121-10** Laboratory ID: **E911113-15**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**9.4**	3.5	ug/m3	EPA TO-15	B
Benzene	**120**	3.2	ug/m3	EPA TO-15	
Toluene	**6.6**	3.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**5.3**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV122-25** Laboratory ID: **E911113-16**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Benzene	**3.4**	3.2	ug/m3	EPA TO-15	

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Sample ID: **SV122-25** Laboratory ID: **E911113-16**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**6.7**	3.8	ug/m3	EPA TO-15	

Sample ID: **SV122-15** Laboratory ID: **E911113-17**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**11**	3.5	ug/m3	EPA TO-15	B
Carbon disulfide	**7.6**	6.3	ug/m3	EPA TO-15	
Toluene	**9.2**	3.8	ug/m3	EPA TO-15	

Sample ID: **SV122-10** Laboratory ID: **E911113-18**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**11**	3.5	ug/m3	EPA TO-15	B
Carbon disulfide	**23**	6.3	ug/m3	EPA TO-15	
Benzene	**12**	3.2	ug/m3	EPA TO-15	
Toluene	**21**	3.8	ug/m3	EPA TO-15	
m,p-Xylene	**11**	8.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**7.6**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV117-5** Laboratory ID: **E911113-19**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**10**	3.5	ug/m3	EPA TO-15	B
Carbon disulfide	**6.3**	6.3	ug/m3	EPA TO-15	
Benzene	**49**	3.2	ug/m3	EPA TO-15	
Toluene	**1100**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**36**	6.9	ug/m3	EPA TO-15	
Ethylbenzene	**430**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**1700**	8.8	ug/m3	EPA TO-15	
o-Xylene	**510**	4.4	ug/m3	EPA TO-15	
4-Ethyltoluene	**170**	5.0	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**200**	5.0	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**570**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV117-10** Laboratory ID: **E911113-20**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**9.8**	3.5	ug/m3	EPA TO-15	B
Carbon disulfide	**9.3**	6.3	ug/m3	EPA TO-15	

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Sample ID: **SV117-10** Laboratory ID: **E911113-20**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**75**	3.2	ug/m3	EPA TO-15	
4-Methyl-2-pentanone (MIBK)	**16**	8.3	ug/m3	EPA TO-15	
Toluene	**1700**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**27**	6.9	ug/m3	EPA TO-15	
Ethylbenzene	**640**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**2500**	8.8	ug/m3	EPA TO-15	
o-Xylene	**870**	4.4	ug/m3	EPA TO-15	
4-Ethyltoluene	**340**	5.0	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**370**	5.0	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**1300**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV118-5** Laboratory ID: **E911115-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **SV118-5-Rep** Laboratory ID: **E911115-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**8.0**	3.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**5.3**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV119-5** Laboratory ID: **E911115-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**13**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**18**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**9.1**	8.8	ug/m3	EPA TO-15	

Sample ID: **SV120-5** Laboratory ID: **E911115-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1,2-Trichlorotrifluoroethane (F113)	**10**	7.7	ug/m3	EPA TO-15	

Sample ID: **SV121-5** Laboratory ID: **E911115-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon disulfide	**13**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**46**	30	ug/m3	EPA TO-15	

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Sample ID: **SV121-5** Laboratory ID: **E911115-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**380**	3.2	ug/m3	EPA TO-15	
Toluene	**5.2**	3.8	ug/m3	EPA TO-15	

Sample ID: **SV122-5** Laboratory ID: **E911115-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**4.5**	3.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**6.1**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV122-5-Rep** Laboratory ID: **E911115-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**4.4**	3.8	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**6.3**	5.0	ug/m3	EPA TO-15	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV117-25 (E911113-01) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	11	ug/m3	2	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	10	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	14	"	"	"	"	"	"	
Vinyl chloride	ND	5.2	"	"	"	"	"	"	
Bromomethane	ND	32	"	"	"	"	"	"	
Chloroethane	ND	16	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	11	"	"	"	"	"	"	
1,1-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	15	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**20**	7.1	"	"	"	"	"	"	B
Carbon disulfide	**25**	13	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	16	"	"	"	"	"	"	
1,1-Dichloroethane	ND	8.2	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Chloroform	ND	9.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	11	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	8.2	"	"	"	"	"	"	
Benzene	**160**	6.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	11	"	"	"	"	"	"	
1,2-Dichloropropane	ND	19	"	"	"	"	"	"	
Bromodichloromethane	ND	14	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	9.2	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	17	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	9.2	"	"	"	"	"	"	
Toluene	**4600**	19	"	5	"	"	"	"	
1,1,2-Trichloroethane	ND	11	"	2	"	"	"	"	
2-Hexanone (MBK)	ND	17	"	"	"	"	"	"	
Dibromochloromethane	ND	17	"	"	"	"	"	"	
Tetrachloroethene	**33**	14	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	16	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	14	"	"	"	"	"	"	
Chlorobenzene	ND	9.4	"	"	"	"	"	"	
Ethylbenzene	**1300**	8.8	"	"	"	"	"	"	
m,p-Xylene	**5400**	18	"	"	"	"	"	"	
Styrene	ND	8.6	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV117-25 (E911113-01) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	**1500**	8.8	ug/m3	2	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	21	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	14	"	"	"	"	"	"	
4-Ethyltoluene	**510**	10	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**630**	10	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**1800**	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	24	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	24	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	24	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*116 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*77-127*		"	"	"	"	
SV117-15 (E911113-02) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	11	ug/m3	2	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	10	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	14	"	"	"	"	"	"	
Vinyl chloride	ND	5.2	"	"	"	"	"	"	
Bromomethane	ND	32	"	"	"	"	"	"	
Chloroethane	ND	16	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	11	"	"	"	"	"	"	
1,1-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	15	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**19**	7.1	"	"	"	"	"	"	B
Carbon disulfide	ND	13	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	16	"	"	"	"	"	"	
1,1-Dichloroethane	ND	8.2	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Chloroform	ND	9.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	11	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	8.2	"	"	"	"	"	"	
Benzene	**130**	6.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV117-15 (E911113-02) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	11	ug/m3	2	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	19	"	"	"	"	"	"	
Bromodichloromethane	ND	14	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	9.2	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	17	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	9.2	"	"	"	"	"	"	
Toluene	**3400**	7.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	11	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	17	"	"	"	"	"	"	
Dibromochloromethane	ND	17	"	"	"	"	"	"	
Tetrachloroethene	**73**	14	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	16	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	14	"	"	"	"	"	"	
Chlorobenzene	ND	9.4	"	"	"	"	"	"	
Ethylbenzene	**1300**	8.8	"	"	"	"	"	"	
m,p-Xylene	**5000**	18	"	"	"	"	"	"	
Styrene	ND	8.6	"	"	"	"	"	"	
o-Xylene	**1600**	8.8	"	"	"	"	"	"	
Bromoform	ND	21	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	14	"	"	"	"	"	"	
4-Ethyltoluene	**500**	10	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**580**	10	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**1800**	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	24	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	24	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	24	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*77-127*		"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-25 (E911113-03) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**11**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**9.5**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**7.1**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**10**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**9.3**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-25 (E911113-03) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*77-127*		"	"	"	"	
SV118-25-Rep (E911113-04) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**11**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**9.5**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-25-Rep (E911113-04) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**13**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**15**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**4.7**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**7.0**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*77-127*	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-15 (E911113-05) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.9**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**17**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**4.8**	4.4	"	"	"	"	"	"	
m,p-Xylene	**17**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-15 (E911113-05) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	**6.3**	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**9.0**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*110 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*77-127*		"	"	"	"	
SV118-10 (E911113-06) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-10 (E911113-06) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**14**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**15**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**5.4**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**8.5**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*77-127*		"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-25 (E911113-07) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.9**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**9.1**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**5.2**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**13**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-25 (E911113-07) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*77-127*		"	"	"	"	
SV119-15 (E911113-08) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	**5.2**	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**11**	3.5	"	"	"	"	"	"	B
Carbon disulfide	**18**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**13**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-15 (E911113-08) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**43**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**8.2**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**7.8**	4.4	"	"	"	"	"	"	
m,p-Xylene	**25**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**8.7**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**11**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*77-127*	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-10 (E911113-09) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.2**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**40**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**12**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**9.5**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-10 (E911113-09) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**5.4**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*	*77-127*		"	"	"	"	
SV120-25 (E911113-10) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV120-25 (E911113-10) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**9.0**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**8.8**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*77-127*		"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV120-15 (E911113-11) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**8.3**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**87**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**31**	4.4	"	"	"	"	"	"	
m,p-Xylene	**140**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV120-15 (E911113-11) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	**57**	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	**12**	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**14**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**49**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*	*77-127*		"	"	"	"	
SV120-10 (E911113-12) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**10**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.9**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**5.2**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.5**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV120-10 (E911113-12) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.4**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**7.8**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*77-127*		"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-25 (E911113-13) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**3.9**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-25 (E911113-13) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*77-127*		"	"	"	"	
SV121-15 (E911113-14) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**38**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-15 (E911113-14) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**140**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**7.4**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**21**	4.4	"	"	"	"	"	"	
m,p-Xylene	**73**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**22**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**5.9**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**18**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*77-127*	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-10 (E911113-15) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.4**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**120**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.6**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-10 (E911113-15) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**5.3**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*77-127*		"	"	"	"	
SV122-25 (E911113-16) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.4**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-25 (E911113-16) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.7**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*77-127*	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-15 (E911113-17) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**11**	3.5	"	"	"	"	"	"	B
Carbon disulfide	**7.6**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**9.2**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-15 (E911113-17) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL91007	10-Dec-19	10-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*77-127*		"	"	"	"	
SV122-10 (E911113-18) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	11-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**11**	3.5	"	"	"	"	"	"	B
Carbon disulfide	**23**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**12**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-10 (E911113-18) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	11-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**21**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**11**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**7.6**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*77-127*	"	"	"	"	

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Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV117-5 (E911113-19) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	11-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**10**	3.5	"	"	"	"	"	"	B
Carbon disulfide	**6.3**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**49**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**1100**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**36**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**430**	4.4	"	"	"	"	"	"	
m,p-Xylene	**1700**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV117-5 (E911113-19) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
o-Xylene	**510**	4.4	ug/m3	1	EL91007	10-Dec-19	11-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	**170**	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**200**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**570**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*110 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*77-127*		"	"	"	"	
SV117-10 (E911113-20) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL91007	10-Dec-19	11-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.8**	3.5	"	"	"	"	"	"	B
Carbon disulfide	**9.3**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**75**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV117-10 (E911113-20) Vapor Sampled: 25-Nov-19 Received: 25-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL91007	10-Dec-19	11-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**16**	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**1700**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**27**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**640**	4.4	"	"	"	"	"	"	
m,p-Xylene	**2500**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**870**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	**340**	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**370**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**1300**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*103 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*77-127*	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-5 (E911115-01) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-5 (E911115-01) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.6 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*93.1 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.3 %*	*77-127*		"	"	"	"	
SV118-5-Rep (E911115-02) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV118-5-Rep (E911115-02) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**8.0**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**5.3**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.0 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*93.7 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.8 %*	*77-127*		"	"	"	"	

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18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-5 (E911115-03) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**13**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**18**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**9.1**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV119-5 (E911115-03) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.1 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*94.1 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.3 %*	*77-127*		"	"	"	"	
SV120-5 (E911115-04) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**10**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV120-5 (E911115-04) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.5 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.8 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.8 %*		*77-127*	"	"	"	"	

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Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-5 (E911115-05) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**13**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**46**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**380**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**5.2**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV121-5 (E911115-05) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*99.5 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*99.2 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.8 %*	*77-127*		"	"	"	"	
SV122-5 (E911115-06) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Terraphase Engineering - Irvine	Project: TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-5 (E911115-06) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
Trichloroethene	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.5**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**6.1**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.5 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*96.3 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.1 %*	*77-127*		"	"	"	"	

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Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-5-Rep (E911115-07) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.4**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV122-5-Rep (E911115-07) Vapor Sampled: 26-Nov-19 Received: 26-Nov-19									
o-Xylene	ND	4.4	ug/m3	1	EL90602	06-Dec-19	06-Dec-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**6.3**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*96.5 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.8 %*	*77-127*		"	"	"	"	

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Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15 - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL90602 - TO-15										
Blank (EL90602-BLK1)				Prepared & Analyzed: 06-Dec-19						
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							

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Volatile Organic Compounds by EPA TO-15 - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL90602 - TO-15										
Blank (EL90602-BLK1)				Prepared & Analyzed: 06-Dec-19						
Ethylbenzene	ND	4.4	ug/m3							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*200*		*"*	*214*		*93.5*	*76-134*			
Surrogate: Toluene-d8	*198*		*"*	*208*		*95.1*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*330*		*"*	*363*		*91.1*	*77-127*			
LCS (EL90602-BS1)				Prepared & Analyzed: 06-Dec-19						
Dichlorodifluoromethane (F12)	110	5.0	ug/m3	101		107	59-128			
Vinyl chloride	50	2.6	"	52.0		96.9	64-127			
Chloroethane	53	8.0	"	53.6		99.6	63-127			
Trichlorofluoromethane (F11)	120	5.6	"	113		109	62-126			
1,1-Dichloroethene	76	4.0	"	80.8		94.5	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	160	7.7	"	155		101	66-126			
Methylene chloride (Dichloromethane)	68	3.5	"	70.8		96.0	62-115			
trans-1,2-Dichloroethene	73	8.0	"	80.8		90.7	67-124			
1,1-Dichloroethane	76	4.1	"	82.4		92.4	68-126			
cis-1,2-Dichloroethene	74	4.0	"	80.0		92.7	70-121			
Chloroform	100	4.9	"	99.2		101	68-123			
1,1,1-Trichloroethane	110	5.5	"	111		98.5	68-125			
1,2-Dichloroethane (EDC)	81	4.1	"	82.4		97.9	65-128			
Benzene	58	3.2	"	64.8		88.8	69-119			

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Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL90602 - TO-15										
LCS (EL90602-BS1)				Prepared & Analyzed: 06-Dec-19						
Carbon tetrachloride	130	6.4	ug/m3	128		99.7	68-132			
Trichloroethene	110	5.5	"	110		105	71-123			
Toluene	73	3.8	"	76.8		94.7	66-119			
1,1,2-Trichloroethane	110	5.5	"	111		99.9	73-119			
Tetrachloroethene	150	6.9	"	138		107	66-124			
1,1,1,2-Tetrachloroethane	170	7.0	"	140		124	67-129			
Ethylbenzene	97	4.4	"	88.4		110	70-124			
m,p-Xylene	97	8.8	"	88.4		110	61-134			
o-Xylene	94	4.4	"	88.4		107	67-125			
1,1,2,2-Tetrachloroethane	150	7.0	"	140		106	65-127			
Surrogate: 1,2-Dichloroethane-d4	*202*		*"*	*214*		*94.4*	*76-134*			
Surrogate: Toluene-d8	*203*		*"*	*208*		*97.7*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*371*		*"*	*363*		*102*	*77-127*			
Batch EL91007 - TO-15										
Blank (EL91007-BLK1)				Prepared & Analyzed: 10-Dec-19						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	10	3.5	"							B
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							

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Volatile Organic Compounds by EPA TO-15 - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL91007 - TO-15										
Blank (EL91007-BLK1)				Prepared & Analyzed: 10-Dec-19						
Chloroform	ND	4.9	ug/m3							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							

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Terraphase Engineering - Irvine	Project: TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number: 5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager: Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL91007 - TO-15										
Blank (EL91007-BLK1)				Prepared & Analyzed: 10-Dec-19						
Surrogate: 1,2-Dichloroethane-d4	*49.0*		*ug/m3*	*42.7*		*115*	*76-134*			
Surrogate: Toluene-d8	*41.3*		*"*	*41.6*		*99.5*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*74.4*		*"*	*72.6*		*102*	*77-127*			
LCS (EL91007-BS1)				Prepared & Analyzed: 10-Dec-19						
Dichlorodifluoromethane (F12)	130	5.0	ug/m3	101		129	59-128			QL-1H
Vinyl chloride	59	2.6	"	52.0		114	64-127			
Chloroethane	57	8.0	"	53.6		106	63-127			
Trichlorofluoromethane (F11)	130	5.6	"	113		111	62-126			
1,1-Dichloroethene	88	4.0	"	80.8		109	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	170	7.7	"	155		111	66-126			
Methylene chloride (Dichloromethane)	81	3.5	"	70.8		114	62-115			
trans-1,2-Dichloroethene	86	8.0	"	80.8		106	67-124			
1,1-Dichloroethane	89	4.1	"	82.4		109	68-126			
cis-1,2-Dichloroethene	87	4.0	"	80.0		109	70-121			
Chloroform	110	4.9	"	99.2		115	68-123			
1,1,1-Trichloroethane	130	5.5	"	111		116	68-125			
1,2-Dichloroethane (EDC)	100	4.1	"	82.4		121	65-128			
Benzene	70	3.2	"	64.8		109	69-119			
Carbon tetrachloride	150	6.4	"	128		118	68-132			
Trichloroethene	100	5.5	"	110		93.4	71-123			
Toluene	71	3.8	"	76.8		91.9	66-119			
1,1,2-Trichloroethane	110	5.5	"	111		97.9	73-119			
Tetrachloroethene	140	6.9	"	138		98.1	66-124			
1,1,1,2-Tetrachloroethane	150	7.0	"	140		106	67-129			
Ethylbenzene	95	4.4	"	88.4		107	70-124			
m,p-Xylene	94	8.8	"	88.4		106	61-134			
o-Xylene	97	4.4	"	88.4		109	67-125			
1,1,2,2-Tetrachloroethane	150	7.0	"	140		106	65-127			
Surrogate: 1,2-Dichloroethane-d4	*48.6*		*"*	*42.7*		*114*	*76-134*			
Surrogate: Toluene-d8	*41.0*		*"*	*41.6*		*98.6*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*79.6*		*"*	*72.6*		*110*	*77-127*			

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch EL91007 - TO-15

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Terraphase Engineering - Irvine	Project:	TP112619-11	
18401 Von Karman Avenue, Suite 410	Project Number:	5030.008.003 / 2955 S. Robertson Blvd.	Reported:
Irvine, CA 92612	Project Manager:	Clare Steedman	12-Dec-19 14:32

Notes and Definitions

QL-1H	The LCS and/or LCSD recoveries fell above the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased high.
B	Analyte is found in the associated blank as well as in the sample.
B	Analyte is found in the associated blank as well as in the sample.
LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

All soil results are reported in wet weight.

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

H&P Mobile Geochemistry, Inc.
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& Field Office - Signal Hill, CA
W handpmg.com E info@handpmg.com
P 760.804.9678 F 760.804.9159

VAPOR / AIR Chain of Custody

DATE: 11.25.19
Page 1 of 2
191044.02

Lab Client and Project Information

Lab Client/Consultant: Terraphase Eng.
Lab Client Project Manager: Clare Steedman
Lab Client Address: 18401 Von Karman Ave, #410
Lab Client City, State, Zip: Irvine, Ca, 92612
Phone Number: 949-377-2227 x 89

Project Name / #: 5030.008.003
Project Location: 2955 S. Robertson Blvd. LA
Report E-Mail(s): clare.steedman@terraphase.com
tim.kloeblene "

Sample Receipt (Lab Use Only)

Date Rec'd: 11/26/19
Control #: ~~191025~~ HB
H&P Project #: ~~TER~~ TP 112619-11
Lab Work Order #: E911113
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below
Receipt Gauge ID: 30005
Temp: RT
Outside Lab:
Receipt Notes/Tracking #:
Lab PM Initials: HB

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☒ Other EDD: ESDAT
☐ CA Geotracker Global ID:

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify):

Sampler Information

Sampler(s): S. Mayfield
Signature:
Date: 11.25.19

Additional Instructions to Laboratory:

** Preferred VOC units (please choose one):*
☐ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
SV117-25	N/A	11.25.19	0736	SV	400mL Sum	063	.80	X						X					
SV117-15			0748			065	.81	X						X					
SV118-25			0815			020	.71	X						X					
SV118-25-Rep			0820			109	.67	X						X					
SV118-15			0847			107	.63	X						X					
SV118-10			0901			229	.62	X						X					
SV119-25			0926			211	.52	X						X					
SV119-15			0940			150	.50	X						X					
SV119-10			1001			132	.46	X						X					
SV120-25			1017			072	.92	X						X					

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
[signature]	TEI	11/25	1400	[signature]	H&P	11.25.19	1400
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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VAPOR / AIR Chain of Custody

DATE: 11.25.19

Lab Client and Project Information

Lab Client/Consultant: Terraphase Eng.	Project Name / #: S030.008.003
Lab Client Project Manager: Clare Steedman	Project Location: 2455 S. Robertson Blvd LA
Lab Client Address: 18401 Von Karmen Ave #410	Report E-Mail(s): Clare.steedman@terraphase.com Tim.Kloeblen@"
Lab Client City, State, Zip: Irvine, Ca, 92612	
Phone Number: 949-377-2227 x 89	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/26/19	Control #: 191044.02
H&P Project # FER112619-11	
Lab Work Order # E911113	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 30005	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: KB	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD:_____
☐ CA Geotracker Global ID:_____

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify):_____

Sampler Information

Sampler(s): S. Mayfield
Signature:
Date: 11.25.19

Additional Instructions to Laboratory:

** Preferred VOC units (please choose one):*
☐ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
SV120-15	N/A	11.25.19	1040	SV	400mL Sum	309	.27	X						X					
SV120-10			1058			300	.10	X						X					
SV121-25			1200			298	-.06	X						X					
SV121-15			1212			256	-.10	X						X					
SV121-10			1233			328	-.16	X						X					
SV122-25			1249			272	-.70	X						X					
SV122-15			1304			248	-.54	X						X					
SV122-10			1321			270	-1.12	X						X					
SV117-5			1341			292	-.84	X						X					
SV117-10			1352			236	-.97	X						X					

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
[signature]	TEI	11/25	1400	[signature]	H&P	11.25.19	1400
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

**Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back*

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VAPOR / AIR Chain of Custody

DATE: 11.26.19
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: Terraphase Eng.	Project Name / #: 5030.008.003
Lab Client Project Manager: Clare Steedman	Project Location: 2555 S. Robertson Blvd, LA
Lab Client Address: 18401 Von Karman Ave #410	Report E-Mail(s): clare.steedman@terraphase.com Tim.Kloeblen@"
Lab Client City, State, Zip: Irvine, Ca, 92612	
Phone Number: 949.377.2227 x 84	

12/5/19 ~~TER~~ 112619-11

Sample Receipt (Lab Use Only)

Date Rec'd: 11/26/19	Control #: 191044.02
H&P Project#	
Lab Work Order # E911115	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 30005	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: KB	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☒ Other EDD: ESDAT
☐ CA Geotracker Global ID:

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify):

Sampler Information

Sampler(s): S. Mayfield
Signature:
Date: 11.26.19

Additional Instructions to Laboratory:

** Preferred VOC units (please choose one):*
☐ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☒ TO-15 ☐ 8260SV	VOCs Short List / Project List ☐ TO-15 ☐ 8260SV	Oxygenates ☐ TO-15 ☐ 8260SV	Naphthalene ☐ TO-15 ☐ 8260SV	TPHv as Gas ☐ TO-15m ☐ 8260SVm	Aromatic/Aliphatic Fractions ☐ TO-15m ☐ 8260SVm	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
SV118-5	N/A	11.26.19	0723	SV	400mL Summa	368	.92	X						X					
SV118-5-Rep			0726			349	.74	X						X					
SV119-5			0740			370	.97	X						X					
SV120-5			0802			376	.64	X						X					
SV121-5			0815			497	.40	X						X					
SV122-5			0834			471	.28	X						X					
SV122-5-Rep	"	"	0837	"	"	546	.84	X						X					

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
[signature]	TEI	11/26	0930	[signature]	H&P	11.26.19	0930
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

H&P Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: TER112519-Tech
Date: 11.26.19
Site Address: 2955 S. Robertson Blvd, LA
Page: 1 of 1
Consultant: Terraphase
H&P Rep(s): S. mayfield
Reviewed: EC
Consultant Rep(s): Tim
Scanned: TTorres

Equipment Info
Inline Gauge ID#: —
Pump ID#: 016

Purge Volume Information
PV Amount: 3PV
PV Includes: ☐ Tubing ☐ Sand 40% ☐ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA
☐ 1,1,1,2-TFA
☐ IPA
☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information							
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O	
1	SV118-5	368	090	0719	-27	0723	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4506	500	9:1	<200	Ø	*A
2	SV118-5-Rep	349	090	0723	-27	0726	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4906	500	—	<200	Ø	
3	SV119-5	370	283	0736	-28	0740	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4506	500	9:1	<200	Ø	
4	SV120-5	376	171	0759	-29	0802	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4506	500	9:1	<200	Ø	
5	SV121-5	497	220	0811	-27	0815	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4506	500	9:1	<200	Ø	
6	SV122-5	471	098	0831	-27.5	0834	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4506	500	9:1	<200	Ø	
7	SV122-5-Rep	546	098	0834	-27.5	0837	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4906	500	—	<200	Ø	
8																						
9																						
10																						
11																						
12																						

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
*A: Drillers used 3-way valves on tubing; I replaced w/ 1-way valves
*windy weather on-site

Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: TER112519-Tech
Date: 11.25.19
Site Address: 2955 S. Robertson Blvd, LA
Page: 1 of 2
Consultant: Terraphase
H&P Rep(s): S. mayfield
Reviewed: EC
Consultant Rep(s): Tim
Scanned: TTorres

Equipment Info
Inline Gauge ID#:
Pump ID#: 014 / 042

Purge Volume Information
PV Amount: 3PV
PV Includes: ☐ Tubing ☐ Sand 40% ☐ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information							
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O	
1	SV117-25	063	235	0731	-27.5	0736	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2503	200	12:31	<200	Ø	*A
2	SV117-15	065	015	0745	-29.5	0748	Ø	15	17	1/4	12	2.25	12	2.25	✓	✓	2358	200	11:47	<200	Ø	
3	SV118-25	020	260	0811	-27	0815	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2503	200	12:31	<200	Ø	
4	SV118-25-Rep	109	260	0815	-27	0820	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2903	200	—	<200	Ø	
5	SV118-15	107	165	0844	-25.5	0847	Ø	15	17	1/4	12	2.25	12	2.25	✓	✓	2358	200	11:47	<200	Ø	
6	SV118-10	229	070	0858	-27	0901	Ø	10	12	1/4	12	2.25	12	2.25	✓	✓	2285	200	11:26	<200	Ø	
7	SV119-25	211	045	0922	-28.5	0926	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2503	200	12:31	<200	Ø	
8	SV119-15	150	085	0936	-27	0940	Ø	15	17	1/4	12	2.25	12	2.25	✓	✓	2358	200	11:47	<200	Ø	
9	SV119-10	132	012	0958	-27	1001	Ø	10	12	1/4	12	2.25	12	2.25	✓	✓	2285	200	11:26	<200	Ø	
10	SV120-25	072	118	1013	-29	1017	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2503	200	12:31	<200	Ø	
11	SV120-15	309	148	1036	-30	1040	Ø	15	17	1/4	12	2.25	12	2.25	✓	✓	2358	200	11:47	<200	Ø	
12	SV120-10	300	096	1054	-28	1058	Ø	10	12	1/4	12	2.25	12	2.25	✓	✓	2285	200	11:26	<200	Ø	

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
*A: Valves from driller were 3-ways, so replaced w/ 1-ways.

H&P Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: TER112519 - Tech
Date: 11.25.19
Site Address: 2955 S. Robertson Blvd, LA
Page: 2 of 2
Consultant: Terraphase
H&P Rep(s): S. Mayfield
Reviewed: EC
Consultant Rep(s): Tim
Scanned: Flores

Equipment Info
Inline Gauge ID#: —
Pump ID#: 016

Purge Volume Information
PV Amount: 3PV
PV Includes: ☐ Tubing ☐ Sand 40% ☐ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information							
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O	
1	SV121-25	298	050	1156	-25.5	1200	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2503 ~~2358~~	200	12:31	<200	Ø	*A
2	SV121-15	256	112	1208	-28	1212	Ø	15	17	1/4	12	2.25	12	2.25	✓	✓	2358	200	11:47	<200	-25"	
3	SV121-10	328	265	1229	-26	1233	Ø	10	12	1/4	12	2.25	12	2.25	✓	✓	2285	200	11:26	<200	Ø	
4	SV122-25	272	294	1246	-27.5	1249	Ø	25	27	1/4	12	2.25	12	2.25	✓	✓	2503	200	12:31	<200	Ø	
5	SV122-15	248	216	1300	-27	1304	Ø	15	17	1/4	12	2.25	12	2.25	✓	✓	2358 ~~2503~~	200	11:47	<200	Ø	
6	SV122-10	270	262	1318	-27.5	1321	Ø	10	12	1/4	12	2.25	12	2.25	✓	✓	2285	200	11:26	<200	Ø	
7	SV117-5	292	031	1337	-27.5	1341	Ø	5	7	1/4	12	3.25	12	3.25	✓	✓	4506	500	9:02	<200	Ø	*B
8	SV117-10	236	137	1348	-28.5	1352	Ø	10	12	1/4	12	3.25	12	3.25	✓	✓	4579	500	9:09	<200	Ø	*B
9																						
10																						
11																						
12																						

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
*B: Hand Augered to 10' w/ 3.25" D bucket, per client.

APPENDIX D
BORING PERMIT

ENVIRONMENTAL HEALTH

Drinking Water Program

5050 Commerce Drive, Baldwin Park, CA 91706
Telephone: (626) 430-5420 • { HYPERLINK "http://publichealth.lacounty.gov/eh/ep/dw/dw_main.htm" }

COUNTY OF LOS ANGELES
Public Health

Work Plan Approval

WORK SITE ADDRESS	CITY	ZIP	EMAIL ADDRESS
2955 South Robertson Blvd	Los Angeles	90034	clare.steedman@terraphase.com

NOTICE:

- WORK PLAN APPROVALS ARE VALID FOR 180 DAYS. 30 DAY EXTENSIONS OF WORK PLAN APPROVALS ARE CONSIDERED ON AN INDIVIDUAL (CASE-BY-CASE) BASIS AND MAY BE SUBJECT TO ADDITIONAL PLAN REVIEW FEES (HOURLY RATE AS APPLICABLE).
- WORK PLAN MODIFICATIONS MAY BE REQUIRED IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED AT THE SITE INSPECTION ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- WORK PLAN APPROVALS ARE LIMITED TO COMPLIANCE WITH THE CALIFORNIA WELL STANDARDS AND THE LOS ANGELES COUNTY CODE AND DOES NOT GRANT ANY RIGHTS TO CONSTRUCT, RENOVATE, OR DECOMMISSION ANY WELL. THE APPLICANT IS RESPONSIBLE FOR SECURING ALL OTHER NECESSARY PERMITS SUCH AS WATER RIGHTS, PROPERTY RIGHTS, COASTAL COMMISSION APPROVALS, USE COVENANTS, ENCROACHMENT PERMISSIONS, UTILITY LINE SETBACKS, CITY/COUNTY PUBLIC WORKS RIGHTS OF WAY, ETC.
- THIS PERMIT IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE SIGNED BY THE DEPUTY HEALTH OFFICER. WORK SHALL NOT BE INITIATED WITHOUT A WORK PLAN APPROVAL STAMPED BY THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.

TO BE COMPLETED BY DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM:

X	WORK PLAN APPROVED FOR: 9 Soil Borings/Exp. Holes	**PERMIT NUMBER:**	SR0174608	**DATE:**	2-13-2019

ADDITIONAL APPROVAL CONDITIONS:

- Work plan approval is issued for scope of work submitted to the Drinking Water Program. Any modifications to the scope of work will require additional work plan review.
- Ensure the boring/exploration hole is backfilled within 24 hours of boring construction.
- Ensure to backfill using a tremie pipe under pressure or equivalent equipment with approved cement grout, proceeding upward from the bottom of the boring/exploration hole.
- Ensure soil borings are sealed per California Well Standards 74-90
  - Cement grout mix ratio of 5-6 gallons of water per 94-pound bag of Portland cement.
  - Up to 6% of Bentonite may be added to the cement-based mix.
  - No hydrated Bentonite chips
- Borings/Exploration holes must comply with all applicable requirements published in the California Well Standards (Bulletins 74-81 and 74-90) and the Los Angeles County Code, Title 11.

APPROVED BY:

Belinda Larsen, REHS
21515 Vanowen St. Ste. 116
Canoga Park, Ca 91303
(818) 593-7308

5838

APPENDIX E
DATA VALIDATION MEMO

DATA VALIDATION MEMORANDUM

To:
Clare Steedman, PG
Principal Geologist, Terraphase
18401 Von Karman Avenue Suite 410
Irvine, California 92612

From:
Kelsey Sherrard, Project Geologist, Terraphase
Kristen Stroud, Project Engineer, Terraphase

cc:
Steven Morrill, PE
Site Assessment Project Manager
Los Angeles Unified School District
Office of Environmental Health and Safety
333 South Beaudry Avenue, 21-223-5
Los Angeles, California 90017

Date:
February 13, 2020

Project Number:
S030.008.004

Subject: Data Validation Memo – LAUSD Alexander Hamilton High School

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This memorandum summarized the finding of a level II data validation for analytical results of 482 soil samples (including 55 duplicate samples), 11 water samples (all equipment blanks), and 101 soil vapor samples (including nine field replicate samples and seven method replicate samples) collected at Alexander Hamilton High School in Los Angeles, California.

DATA VALIDATION METHODS

The Quality Assurance objectives of the investigation are to assure that sampling, analysis and reporting activities provide data that are accurate, precise, representative, and legally defensible. Quality Control represents the specific steps and procedures followed during the project to achieve quality assurance. Data validation is a process of evaluating the performance of data collection against the predetermined method, procedural, or contractual requirements specified. It checks for improper practices, abuse and warning signs shown during the investigation. It determines if the available data satisfies the projects data quality objectives and data use requirements by evaluating the data reports for field sampling procedures, laboratory performance and error checks.

Terraphase conducted this Level II data validation for analytical results prepared by SunStar Laboratories Inc. of Lake Forest, California (SunStar), Enthalpy Analytical of Orange, California (Enthalpy), Jones Environmental of Santa Fe Springs, California (Jones), and H&P Mobile Geochemistry Inc. of Carlsbad, California (H&P), including review of project QC program, sampling produces, analytical procedures, data reports and DQOs. Each review is presented below. The review of data reports and DQOs are discussed separately by media.

Review of Sampling Procedures

Terraphase staff supervised the sampling activities performed to date at the site. Field activities were planned, conducted, and completed in a manner consistent with the Updated Preliminary Environmental Assessment Equivalent (PEA-E) Proposed Sampling Summary, prepared by Roux Environmental Engineering and Geology, dated April 20, 2018. No findings were identified affecting the quality of the samples collected or the resulting data results.

Field Documentation

Field logs and other documents were reviewed by Clare Steedman, the Terraphase project manager, regarding sampling procedures (e.g. sample containers, collection, preservation, packaging, transportation, receipt, handling and storage, chain of custody, holding time, and decontamination procedures) conducted at the site during the PEA-E sampling. Samples were transferred to the lab under standard chain of custody protocol.

Boring Logs

Boring logs for the sampling conducted on date were reviewed by Clare Steedman, a California-licensed Professional Geologist.

Review of Analytical Procedures

Terraphase evaluated analytical methods used, laboratory certification, and reporting limits. Analytical procedures were conducted in line with referenced method standard operating procedures. No findings were identified affecting the quality of the samples collected or the resulting data results.

Analytical Method

Samples were analyzed for the following analytes by methods described below, respectively.

Soil Analytical Methods:

Samples were analyzed for metals by EPA method 6010 (Title 22 Metals), OCPs by EPA method 8081A, PCBs by EPA method 8082, VOCs by EPA method 8260, SVOCs by EPA method 8270C (also C SIM), TPH by 8015M (Ext.), dioxins and furans by EPA method 8290, and lead and arsenic by EPA method 6020.

Soil Vapor Analytical Methods:

Samples were analyzed for VOCs by EPA methods 8260SV and TO-15.

Laboratory Certification

Samples were analyzed by Sun Star, Jones, H&P, and Enthalpy. Each lab holds its own accreditation through the Environmental Laboratory Accreditation Program (ELAP).

Reporting Limits

Reporting limits were below screening levels with the following exceptions: cadmium, thallium, 1,4-dichloro-2-butene in soil and 1,2,3-trichloropropene, 1,2-dibromo-3-chloropropane, 1,2-diobromethane, and vinyl chloride in soil vapor.

SOIL DATA VALIDATION

Review of Laboratory Reports

The data were reviewed in accordance with the National Functional Guidelines for Superfund Organic Methods Data Review, (January 2017; (USEPA-540-R-2017-002), with the National Functional Guidelines for Superfund Inorganic Methods Data Review, (January 2017; (USEPA-540-R-2017-001), Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control Board, and the San Francisco Regional Water Quality Control Board Advisory – Active Soil Gas Investigations (July 2015), the pertinent methods referenced by the data package, and professional and technical judgment. Data verification and validation were performed in performed in general conformance with the Stage 2 validation described in the Guidance for Labelling Externally Validated Laboratory Analytical Data for Superfund Use (USEPA 2009).

Data Package Completeness

A case narrative was not included for any soil laboratory reports from SunStar Laboratory or Enthalpy Laboratory. The laboratory project managers were contacted directly, and confirmed that all samples were received intact, in the correct containers, appropriately labeled and preserved. All other required elements of the data packages were present, including: chain-of-custody, sample receipt checklist, results, and QC results.

Verification of Electronic Data Deliverable to Hardcopy Data Package

Sample results and related quality control data were received in both an electronic and hardcopy format.

Chain of Custody

For report T182803f, samples B61-5.0, B61.10.0, and B61-15.0 were incorrectly labeled as B60-5.0, B60-10.0, and B60-15.0 and corrected by the lab.

For report T182898f samples B18-0.5, B18-1.5, and B18-2.5 were mislabeled B12-0.5, B12-1.5, and B12-2.5 when received and were corrected by the lab. Sample B4-5.0 was not marked for 8260 on the COC, Terraphase was contacted and 8260 analysis was added.

For report T183454f sample 04 on the COC (B60-5.0) was marked as SV60-5.0 and sample 19 (B56-2.5) was marked as B56-5.0. These two jars were mislabeled and updated at the lab by matching the sample times.

For report T183494f the COC arrived without sample times. Two samples arrived with the same sample label of SV64-10.0, one was relabeled SV62-10.0. Terraphase was contacted by the lab and the samples were identified based on the times listed on the samples and the field logs.

For report 416329, the following were missing when received by the lab: missing all containers for B102-0.5-DUP (416329-034); B100-2.5 missing one jar (416329-039); B99-2.5 missing 3 VOAs (416329-043); B98-2.5 missing 3 VOAs (416329-046); B79-2.5 3 VOAs were received but 5035 test not requested (416329-008); and 1 jar and 3 VOAs were not labeled. Terraphase was contacted by the lab and confirmed that the unlabeled jar and VOAs were sample B98-2.5 (416329-046).

For report 418425 the third sample B03-CC-1.5 was initially incorrectly logged by the lab as B25-CC-1.5. The lab was contacted by Terraphase and the login mistake was resolved.

All other sample identification (ID) numbers listed on the chain-of-custody record are consistent with the sample ID reported in the laboratory electronic data deliverable (EDD) and hardcopy data package.

Sample Preservation

For report 416244 soil samples were received at temperatures of 7.5 degrees Celsius. For report 416293 soil samples were received at temperatures of 10.7 and 11.2 degrees Celsius. For report 416329 soil samples were received at temperatures of 12.5 and 5.2 degrees Celsius. For report T183454f soil samples were received at temperatures of 5.1 and 6.3 degrees Celsius. For report T183494f soil samples were received at temperatures of 11.2 and 12.4 degrees Celsius. For report T183495f soil samples were received at temperatures of 11.3 and 13.3 degrees Celsius. For report 418214 soil samples were received at a temperature of 1.8 degrees Celsius. For report 418425 soil samples were received at a temperature of 6.8 degrees Celsius. Proper preservation includes samples chilled to 4 ± 2 degrees Celsius. Samples were received on ice directly from the field and the cooling process had begun.

All other samples were preserved within the acceptable range of 4 ± 2 degrees Celsius.

For report T182898f sample B4-2.5-DUP 4-ounce jar was received broken and in a plastic bag at the SunStar Lab.

For report T183212f sample B46-0.5 did not have any methanol in the container as noted by the laboratory when they received it.

Holding Times

For report 416329 sample EB-03 (lab # 416329-071) was extracted/analyzed past the holding time for TPH-diesel and TPH-motor oil.

All other samples were analyzed within the proper holding times.

Method Blank Analysis

In laboratory report 416244 antimony and arsenic were detected in the method blank sample for batch QC1203116, antimony was detected in the method blank sample for batch QC1203117, and antimony and molybdenum were detected in the method blank sample for batch QC1203163. Method blank sample detections were J flagged by the laboratory indicating estimated values. Analytes were not detected in the associated samples; therefore, no results were qualified.

In laboratory report 416293 copper, molybdenum, and thallium were detected in the method blank sample for batch QC1203159; antimony, copper, iron, lead, molybdenum, silver, and thallium were detected in the method blank for batch QC1203270. Iron in batch QC1203270 was detected above the reporting limit. All other method blank sample detections were J flagged by the laboratory indicating estimated values. Detections in associated samples were qualified.

In laboratory report 416329 methylene chloride was detected in the method blank sample for batches QC1203262 and QC1203265, antimony was detected in the method blank sample for batch QC1203337, thallium was detected in the method blank sample for batch QC1203350MB1, TPH diesel was detected in the method blank in batches QC1203649 and QC1203649. Method blank sample detections were J flagged by the laboratory indicating estimated values. Analytes detected in the associated samples were qualified.

For report T183494f the method blank contains analyte at a concentration above the MRL in batch 8112638 for copper and zinc; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.

For report 421801 the reported value of methylene chloride in the method blank has a J flag which is defined by the laboratory by an estimated value for batch QC1209213 and batch QC1209237. For batch QC1209268 antimony and selenium were present in an associated method blank and the value for selenium has a J flag which is defined by the laboratory by an estimated value. The base MDL/RL limits do not include the 100x dilution for the EPA 6020 STLC Method Blank in batch QC1212551 due to software limitation at the laboratory. The STLC Method Blank limits are actually 10 µg/L and 50 µg/L, which would make the 11.8 µg/L Method Blank detection a “J” flagged estimated value.

No other target compounds were detected in the method blank samples.

Laboratory Control Samples

For report 416244 the laboratory control sample (LCS) percent recovery was out of laboratory control limits for beryllium. Beryllium was not detected in any samples associated with this sample batch, therefore, no results was qualified.

For report 416329 the LCS percent recovery was out of control limits for endrin aldehyde in batch QC1203294 and endrin ketone in batch QC1203440. Endrin aldehyde and endrin ketone were not detected in any samples associated with this sample batch, therefore, no results were qualified.

For report T182898f, the original report included LCS for metals not requested by Terraphase. The report was then revised to only report LC metals relevant to the project. This report was revised to correct QC section for 6020 Arsenic and Lead. The RPD in the original report is also reported in error and was revised. Actual RPD acceptance value is 20.

For report 418425, the LCS or laboratory control sample duplicate (LCSD) was out of control limits for beryllium. Associated sample data was reported with qualifier.

All percent recovery values for LCS were within acceptable criteria established by the laboratory for the respective testing methods.

Surrogate Compound Recovery

Surrogate compound recovery was not performed for reports 412613, 416244, 418214, and 418425. Precision was evaluated using the laboratory control sample analysis.

For report 416329 the surrogate recovery was out of control limits for Decachlorobiphenyl DCB in sample B108-1.5 due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.

For report T182803f the surrogate recovery was below acceptance criteria for 4-Bromofluorobenzene in samples B53-15.0 and B65-10.0 because of possible matrix effect. The surrogate recovery was within acceptance criteria in the associated method blank and LCS. Surrogate recovery was below acceptance criteria for Decachlorobiphenyl in samples B03-1.5, B03-2.5, B07-0.5, B07-1.5, B07-2.5, B08-0.5 and B08-1.5. The data was accepted based on valid recovery of the remaining surrogate.

For report T183494f multiple analysis yielded poor internal standard and/or surrogate recoveries due to matrix effect. Results reported are from the most complete recovery of internal standards, however, recoveries were not within the acceptable limits of the method. The surrogate recovery for sample SV56-10.0 (lab # T183494-04) is outside of established control limits due to possible sample matrix effect. The surrogate recovery for sample SV55-15.0 (lab # T183494-07) is outside of established control limits due to possible sample matrix effect.

All other percent recovery values for surrogate compounds were within acceptable criteria established by the laboratory for the respective testing methods.

Sample Duplicate Analysis

Sample duplicate analysis was not performed for report 412613, 416244, 416293, 416329, T182803f_addl, T182898f_addl, T183211f_addl, T183212f_addl, T183495f, 418214, 418425, and 421801. Precision was evaluated using the laboratory control sample analysis.

For report T183211f the spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference in the sample duplicate for chromium and lead for batch 8102322. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.

All other relative percent differences (RPDs) for sample duplicates were within acceptable criteria established by the laboratory for the respective testing methods.

Blank Spike/Blank Spike Duplicate Analyses

Blank spike and blank spike duplicate analysis was not performed for reports 412613, 416244, 416293, 416329, T182898f, T182726f, 418214, 418425, and 421801. Precision was evaluated using the laboratory control sample analysis.

All other percent recoveries and relative percent differences (RPDs) for blank spikes and blank spike duplicates were within acceptable criteria established by the laboratory for the respective testing methods.

Matrix Spike/Matrix Spike Duplicate Analyses

For report 416244 the percent recovery for antimony in the matrix spike and matrix spike duplicate in batches QC1203116, QC1203117 were below laboratory control limits due to matrix interference. The percent recovery for antimony, beryllium, and zinc for the matrix spike and matrix spike duplicate in batches QC1203163 were outside of laboratory control limits due to matrix interference. The associated LCS samples were within control limits and no results were qualified.

For report 416293 the percent recovery for heptachlor in the matrix spike and matrix spike duplicate in batch QC1203239 was above laboratory control limits due to matrix interference. The percent recovery for antimony matrix spike and matrix spike duplicate in batch QC1203270 was below laboratory control limits due to matrix interference. The percent recovery for arsenic and lead in the matrix spike duplicate in batch QC1203275 was below laboratory control limits due to matrix interference. The relative percent difference for lead in batch QC1203275 was outside of laboratory control limits due to matrix interference. The associated LCS samples were within control limits and no results were qualified.

For report 416329 the percent recovery for antimony in the matrix spike and matrix spike duplicate in batch QC1203337. The percent recovery for 4,4'-DDE and methoxychlor in the matrix spike and matrix spike duplicate in batch QC1203340 and 4,4'-DDE in the matrix spike and matrix spike duplicate in batch QC1203448 were not within control limits due to matrix interference. The results for endrin, endrin aldehyde, endrin ketone, and methoxychlor in batch QC1203448 were not within control limits due to matrix interference. The results for PCB-1260 in batch QC1203449 were not within control limits due to matrix interference. The associated LCS and /or LCSD results were within control limits and the sample data was reported without further clarification.

For report T182726f the matrix spike and matrix spike duplicate percent recoveries were outside of acceptance criteria for chromium, the associated post spike percent recovery results were within acceptance criteria and results were accepted. The matrix spike and matrix spike duplicate percent recoveries were outside of acceptance criteria for barium, the associated LCS and/or LCSD results were within control limits and results were accepted.

For report T182803f the percent recovery was outside acceptance criteria for arsenic, barium, chromium and lead the matrix spike and matrix spike sample duplicate in multiple batches. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results. The spike recovery and or RPD was outside acceptance limits for the MS and/or MSD for barium, lead, arsenic. The batch was accepted based on acceptable LCS recovery.

For report T182898f the percent recovery and/or RPD was below acceptance criteria for arsenic in batch 8092011-MS1 in the MS (QR-04). The associated post spike sample 8092011-RS1 had percent recovery above acceptance range for barium and percent recovery was not recovered for chromium. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected. The percent recovery and/or RPD was outside acceptance criteria for barium. Results accepted based upon percent recovery results in the post spike and/or serial dilution.

For report T183211f the percent recovery and/or RPD was outside acceptance criteria for arsenic and lead for the MS and MSD. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results. The spike recovery was outside acceptance limits for the MS and/or MSD

due to possible matrix interference for batch 8102322 for cadmium, chromium, and lead. This also affected the post spike for chromium and lead. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected. The percent recovery and/or RPD was outside acceptance criteria in batch 8102329 for the MS and MSD. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results. The percent recovery and/or RPD was outside acceptance criteria in batch 8102332 for the MS and MSD for 4,4'-DDT. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.

For report T183212f the percent recovery and/or RPD was outside acceptance criteria in batch 8102416-MSD1 and 8102416-MSD1 for the MS and MSD for lead. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.

For report T183454f the percent recovery and/or RPD was outside acceptance criteria in batch 8112020-MS1 and 8112020-MSD1 for the MS and MSD for lead. Results accepted based upon percent recovery results in the post spike and/or serial dilution. The percent recovery and/or RPD was outside acceptance criteria in batch 8112026 for the MS for lead. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results. The percent recovery and/or RPD was outside acceptance criteria in batch 8112013 for the MSD for aldrin. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.

For report T183494f the percent recovery and/or RPD was outside acceptance criteria for lead in the MS and MSD for batch 8112638. Results accepted based upon percent recovery results in the post spike and/or serial dilution. The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference for batch 8112638 for lead. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected. The percent recovery and/or RPD was outside acceptance criteria in batch 8112638 for the MSD for chromium. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results. The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference for batch 8113016 for mercury. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.

For report 418425, the MS and/or MSD was not within control limits due to matrix interference for antimony, barium, lead, vanadium, and zinc. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.

For report 421801 the analyte concentration for trichloroethene in the sample exceeded the spike level by a factor of four or greater, the spike recovery and limits do not apply. The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits for lead and arsenic due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.

All other percent recoveries and relative percent differences (RPDs) for matrix spikes and matrix spike duplicates were within acceptable criteria established by the laboratory for the respective testing methods.

Trip Blank Sample Analysis

No trip blank samples were collected.

Equipment Blank Sample Analysis

No equipment blank sample was collected for reports T182803f_addl, T182898f_addl, T183211f_addl, T183212f_addl, T183495, and 418425.

For report 416293 copper, thallium, vanadium, and zinc were detected above the method detection limit but below the reporting limit in the equipment blank sample at concentrations of 0.005 mg/L, 0.014 mg/L, 0.006 mg/L, and 0.011 mg/L respectively. All detected results were greater than five times the associated equipment blank sample and no results were qualified.

For report 416329 TPH-diesel and methylene chloride were detected above the method detection limit but below the reporting limit in the equipment blank sample at concentrations of 0.07 mg/L and 1.5 µg/L respectively. All detected results were greater than five times the associated equipment blank sample and no results were qualified.

For report T182726f toluene was detected in the equipment blank sample. Toluene was not detected in any of the associated samples and no results were qualified.

For report T182803f C6-C12 (GRO) and Toluene were detected in the equipment blank sample. Toluene and C6-C12 (GRO) was not detected in any of the associated samples and no results were qualified.

No target compounds were detected in the other equipment blank samples of the other reports.

Field Duplicate Analysis

The tables below show the detected concentrations of various analytes in the primary and duplicate samples, respectively, with the calculated RPD. Results are specified by the lab report header. Results are shown if they have RPDs that exceed the acceptable limit of 30%, if the RPD is zero, or if the RPD could not be calculated where either the primary or the duplicate result was ND. In that case, the RPD is reported as NC for not calculated. The analytes are not listed in the table if both the primary and duplicate sample results were ND for non-detect or if the RPD was less than 30%.

Report 412613:

Analyte	Unit	AB02-15.0	AB02-15.0-DUP	RPD
Arsenic	mg/kg	**14.6**	**20.0**	**31**

Analyte	Unit	AB03-25.0	AB03-25.0-DUP	RPD
Arsenic	mg/kg	**15.5**	**10.5**	**38**

Analyte	Unit	AB07-20.0	AB07-20.0-DUP	RPD
Arsenic	mg/kg	**15.7**	**10.4**	**41**

Report 416293:

Analyte	Unit	B11A-1.5	B11A-1.5-DUP	RPD
Arsenic	mg/kg	**3.93**	**9.12**	**80**

Analyte	Unit	B20A-0.5	B20A-0.5-DUP	RPD
Arsenic	mg/kg	**4.84**	**17.5**	**113**

Analyte	Unit	B25A-0.5	B25A-0.5-DUP	RPD
Lead	mg/kg	**24.7**	**17.9**	**32**

Analyte	Unit	B91A-1.5	B91A-1.5-DUP	RPD
Lead	mg/kg	**19.1**	**13.7**	**33**

Report 416329:

Analyte	Units	B101-0.5	B101-0.5	RPD
Antimony	mg/kg	**1.87**	**0.55**	**109**
Lead	mg/kg	**5.17**	**9.14**	**55**
Thallium	mg/kg	**0.85**	**2.13**	**86**
Zinc	mg/kg	**64.2**	**87.7**	**31**

Analyte	Units	B103-0.5	B103-0.5-DUP	RPD
Arsenic	mg/kg	**12.8**	**5.36**	**82**
4,4'-DDE	mg/kg	0.003	<0.005	NC
4,4'-DDT	mg/kg	0.0036	<0.005	NC

Analyte	Units	B105-0.5	B105-0.5-DUP	RPD
Arsenic	mg/kg	**4.24**	**6.32**	**39**
Lead	mg/kg	**7.53**	**13.7**	**58**

Analyte	Units	B79-0.5	B79-0.5-DUP	RPD
4,4'-DDE	mg/kg	0.003	<0.005	NC
4,4'-DDT	mg/kg	0.0036	<0.005	NC

Analyte	Units	B81-0.5	B81-0.5-DUP	RPD
4,4'-DDE	mg/kg	0.003	<0.005	NC

4,4'-DDT	mg/kg	0.0036	<0.005	NC

Analyte	Units	B83-0.5	B83-0.5-DUP	RPD
Arsenic	mg/kg	**6.88**	**11.1**	**47**
Lead	mg/kg	**88.6**	**18.5**	**131**
4,4'-DDE	mg/kg	0.003	<0.005	NC
4,4'-DDT	mg/kg	**0.0086**	**<0.005**	**NC**

Analyte	Units	B85-0.5	B85-0.5-DUP	RPD
Acetone	mg/kg	**0.28**	**0.16**	**55**
Ethylbenzene	mg/kg	**0.0005**	**0.0003**	**51**
tert-Butyl alcohol	mg/kg	**0.019**	**<0.012**	**NC**
Xylene (m & p)	mg/kg	**0.0016**	**0.0011**	**37**
Xylene (o)	mg/kg	**0.0007**	**0.0005**	**32**
Xylene Total	mg/kg	**0.0023**	**0.0016**	**35**

Analyte	Units	B99-0.5	B99-0.5-DUP	RPD
Antimony	mg/kg	**2.34**	**0.7**	**108**
Thallium	mg/kg	**1.52**	**1.0**	**41**
chlordane	mg/kg	**<0.05**	**0.094**	**61**
4,4'-DDE	mg/kg	**0.0022**	**0.027**	**170**
4,4'-DDT	mg/kg	**<0.005**	**0.051**	**NC**
Dieldrin	mg/kg	**<0.005**	**0.0099**	**NC**

Report T182898:

Analyte	Units	B04-2.5	B04-2.5 DUP	RPD
Antimony	mg/kg	**16.0**	**9.8**	**48**
Chromium (III+VI)	mg/kg	42.0	42.0	0
Cobalt	mg/kg	18.0	17.0	6
Copper	mg/kg	38.0	38.0	0
Lead	mg/kg	**13.0**	**8.0**	**48**

Report T183211:

Analyte	Units	B92-0.5	B92-0.5-DUP	RPD
Arsenic	mg/kg	**11.0**	**4.5**	**84**
4,4'-DDE	mg/kg	**0.017**	**0.0067**	**87**

Analyte	Units	B92-2.5	B92-2.5-DUP	RPD
Lead	mg/kg	**16.0**	**10.0**	**46**

Analyte	Units	B51-0.5	B51-0.5-DUP	RPD
Lead	mg/kg	**7.3**	**15.0**	**69**

Analyte	Units	B51-1.5	B51-1.5-DUP	RPD
Lead	mg/kg	**15.0**	**9.7**	**43**

Analyte	Units	B13-0.5	B13-0.5-DUP	RPD
Arsenic	mg/kg	14.0	14.0	0
Lead	mg/kg	**36.0**	**7.9**	**128**

Analyte	Units	B26-1.5	B26-1.5-DUP	RPD
Arsenic	mg/kg	**8.6**	**6.1**	**34**
Lead	mg/kg	7.7	7.7	0

Report T183212:

Analyte	Units	B31-2.5	B31-2.5-DUP	RPD
Arsenic	mg/kg	**18.0**	**13.0**	**32**

Analyte	Units	B19-0.5	B19-0.5-DUP	RPD
Chlordane (trans) (gamma)	ug/kg	**6.1**	**8.9**	**37**
Arsenic	mg/kg	**22.0**	**15.0**	**38**

Analyte	Units	B19-1.5	B19-1.5-DUP	RPD
Arsenic	mg/kg	18.0	18.0	0

Analyte	Units	B19-2.5	B19-2.5-DUP	RPD
Arsenic	mg/kg	**14.0**	**21.0**	**40**

Analyte	Units	B46-0.5	B46-0.5-DUP	RPD
Arsenic	mg/kg	**<0.008**	**10.0**	**NC**
Barium	mg/kg	**91.0**	**150.0**	**49**
Chromium (III+VI)	mg/kg	**18.0**	**25.0**	**33**
Cobalt	mg/kg	**7.9**	**12.0**	**41**
Copper	mg/kg	**21.0**	**31.0**	**38**
Lead	mg/kg	**21.0**	**<0.009**	**NC**
Nickel	mg/kg	**14.0**	**19.0**	**30**
Vanadium	mg/kg	**43.0**	**63.0**	**38**
TPH as Motor Oil	mg/kg	**<6.2**	**64.0**	**NC**

Analyte	Units	B46-1.5	B46-1.5-DUP	RPD
Barium	mg/kg	**190.0**	**130.0**	**38**
Chromium (III+VI)	mg/kg	**40.0**	**28.0**	**35**
Copper	mg/kg	**67.0**	**29.0**	**79**
Vanadium	mg/kg	**98.0**	**70.0**	**33**
Zinc	mg/kg	**95.0**	**62.0**	**42**

Report T183454:

Analyte	Units	B55-0.5	B55-0.5-DUP	RPD
Lead	mg/kg	**15.0**	**22.0**	**38**

Analyte	Units	B55-5.0	B55-5.0-DUP	RPD
Arsenic	mg/kg	**20.0**	**<0.008**	**NC**
Barium	mg/kg	**150.0**	**110.0**	**31**
Chromium (III+VI)	mg/kg	32.0	32.0	0
Zinc	mg/kg	**160.0**	**62.0**	**88**
TPH as Motor Oil	mg/kg	**24.0**	**<6.2**	**NC**

Report 421801:

Analyte	Units	B12-BBB-0.5	B12-BBB-0.5-DUP	RPD
Lead	mg/kg	**1030**	**32**	**188**

Analyte	Units	B20-BBB-0.5	B20-BBB-0.5-DUP	RPD
Arsenic	mg/kg	43.9	56.9	26

Analyte	Units	SV117-15.0	SV117-15.0-DUP	RPD
Benzene	mg/kg	0.0005	0.0004	16
Toluene	mg/kg	0.0001	0.0001	7

Analyte	Units	SV120-5.0	SV120-5.0-DUP	RPD
Acetone	mg/kg	0.053	0.056	6
Benzene	mg/kg	0.0004	0.0004	2
Methyl Ethyl Ketone	mg/kg	0.0051	0.0046	10
Toluene	mg/kg	0.0002	0.0002	11

Analyte	Units	SV122-25.0	SV122-25.0-DUP	RPD
Benzene	mg/kg	<0.004	0.0004	**NC**
Dichloromethane	mg/kg	<0.004	0.0021	**NC**
Toluene	mg/kg	<0.004	0.0004	**NC**

Dilution Factors

For report T183211f the reporting limit for several compounds was raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

For report T183212f the reporting limit for several compounds was raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

For report T183454f the reporting limit for several compounds was raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

All other dilution factors were within acceptable criteria established by the laboratory for the respective testing methods.

Compound Identification and Quantitation

The laboratory did not apply flags to any of the analytes for reports 412613, 416244, T182726f, T182803f, T183495f, 418214, and 418425.

The laboratory applied the following flags to report 416293:

B1 Analyte was present in a sample and associated method blank greater than MDL but less than RDL.

Results for the following samples/analytes were B1-flagged:

Sample	B1-Flagged Analytes (Report 416293)
B70B-0.5	Antimony, Molybdenum

B70A-0.5	Antimony, Molybdenum
B70B-1.5	Antimony, Thallium
B70A-1.5	Molybdenum
EB-02	Copper, Thallium

J Reported value estimated.

Results for the following samples/analytes were J-flagged:

Sample	J-Flagged Analytes (Report 416293)
B70B-0.5	Antimony, Cadmium, Molybdenum, 4,4'-DDD
B70A-0.5	Antimony, Cadmium, Molybdenum, Selenium
B70B-1.5	Antimony, Thallium
B70A-1.5	Molybdenum
EB-02	Copper, Thallium, Zinc,

D2 Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.

Results for the following samples/analytes were D2-flagged:

Sample	D2-Flagged Analytes (Report 416293)
B70B-1.5	4,4'-DDD, 4,4'-DDE, 4,4'-DDT, a-BHC, Aldrin, b-BHC, Chlordane, d-BHC, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin Ketone, Heptachlor, Heptachlor epoxide, Lindane (Gamma-BHC), Methoxychlor, Toxaphene

The laboratory applied the following flags to report 416329:

J Reported value estimated.

Results for the following samples/analytes were J-flagged:

Sample	J-Flagged Analytes (Report 416329)
B83-0.5	4,4'-DDE
B85-0.5	1,2,4-Trimethylbenzene, 2-Butanone, Benzene, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)
B85-0.5-DUP	2-Butanone, Benzene, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)

B85-1.5	1,2,4-Trimethylbenzene, 2-Butanone, Benzene, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)
B85-2.5	2-Butanone, Acetone, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)
B86-0.5	4,4'-DDT, 1,2,4-Trimethylbenzene, 2-Butanone, Benzene, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)
B86-1.5	2-Butanone, Benzene, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)
B86-2.5	2-Butanone, Acetone, Benzene, Ethylbenzene, m and p-Xylene, o-Xylene, Toluene, Xylenes (Total)
B101-0.5	Antimony, Thallium
B101-0.5-DUP	Antimony, Thallium
B101-1.5	Antimony, Thallium
B101-2.5	Thallium
B102-0.5	Heptachlor epoxide
B102-1.5	Antimony, Thallium
B102-2.5	Antimony, Thallium
B100-0.5	Antimony, Thallium
B100-1.5	Antimony, Thallium
B100-2.5	Antimony, Thallium
B99-0.5	Antimony, Thallium, 4,4'-DDE
B99-0.5-DUP	Antimony, Thallium, 4,4'-DDD
B99-1.5	Antimony, Thallium
B99-2.5	Antimony, Thallium
B98-0.5	Antimony, Thallium
B98-1.5	Antimony, Thallium
B98-2.5	Antimony, Thallium, 4,4'-DDT
B109-0.5	4,4'-DDT
B108-1.5	4,4'-DDE, 4,4'-DDT, Heptachlor epoxide
B106-1.5	4,4'-DDT, Dieldrin
B103-0.5	4,4'-DDE, 4,4'-DDT
B103-1.5	4,4'-DDE, 4,4'-DDT
B103-2.5	4,4'-DDE, 4,4'-DDT, Dieldrin
EB-03	Methylene chloride, TPH Diesel

L The LCS or LCSD was out of control limits. Associated sample data was reported with qualifier.

Results for the following samples/analytes were L-flagged:

Sample	L-Flagged Analytes (Report 416329)
B99-1.5	Endrin aldehyde
B99-2.5	Endrin aldehyde
B98-0.5	Endrin aldehyde
B98-1.5	Endrin aldehyde
B98-2.5	Endrin aldehyde
B109-0.5	Endrin aldehyde
B109-2.5	Endrin aldehyde
B108-0.5	Endrin aldehyde
B108-2.5	Endrin aldehyde
B107-0.5	Endrin aldehyde
B107-1.5	Endrin aldehyde
B107-2.5	Endrin aldehyde
B106-0.5	Endrin aldehyde
B106-1.5	Endrin aldehyde
B106-2.5	Endrin aldehyde
B105-0.5	Endrin aldehyde
B105-1.5	Endrin aldehyde
B103-0.5	Endrin aldehyde
EB-03	Endrin Ketone

B1 Analyte was present in a sample and associated method blank greater than MDL but less than RDL

Results for the following samples/analytes were B1-flagged:

Sample	B1-Flagged Analytes (Report 416329)
EB-03	TPH Diesel

T Sample was extracted/analyzed past the holding time.

Results for the following samples/analytes were T-flagged:

Sample	T-Flagged Analytes (Report 416329)
EB-03	TPH Diesel, TPH Motor Oil

The laboratory applied the following flags to report T182898f:

J Analyte concentration is below calibration range.

Results for the following samples/analytes were J-flagged:

Sample	J-Flagged Analytes (Report T182898f)
11895-001-SA (B4-2.5)	1,2,3,7,8,9-HxCDF, Total TCDF, Total PeCDF, Total HxCDF
11895-002-SA (B4-2.5-DUP)	1,2,3,7,8,9-HxCDF, Total TCDF, Total PeCDF, Total HxCDF

The laboratory applied the following flags to report T183211f:

R-07 Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

Results for the following samples/analytes were R-07-flagged:

Sample	R-07-Flagged Analytes (Report T183211f)
B13-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B15-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B26-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B43-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B42-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene

The laboratory applied the following flags to report T183212f:

R-07 Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

Results for the following samples/analytes were R-07-flagged:

Sample	**R-07-Flagged Analytes (Report T183212f)**
B31-0.5-DUP	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B31-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B12-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B11-1.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B11-2.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B90-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B93-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene

The laboratory applied the following flags to report T183454f:

R-07 Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

Results for the following samples/analytes were R-07-flagged:

Sample	**R-07-Flagged Analytes (Report T183454f)**
B60-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B62-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B20-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B21-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B21-1.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene
B50-0.5	Alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide, gamma-Chlordane, alpha-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoyxchlor, Endrin ketone, Toxaphene

The laboratory applied the following flags to report 421801:

J Reported value estimated.

Results for the following samples/analytes were J-flagged:

Sample	J-Flagged Analytes (Report 421801)
SV117-5.0	1,2,4-Trimethylbenzene, 2-Butanone (MEK), Benzene
SV117-10.0	2-Butanone (MEK), Benzene, Methylene chloride, Toluene
SV117-15.0	Benzene, Toluene
SV117-15.0-DUP	Benzene, Toluene
SV117-25.0	Benzene
SV119-5.0	2-Butanone (MEK), Acetone, Benzene, Toluene
SV118-5.0	2-Butanone (MEK), Benzene, Toluene
SV118-10.0	Benzene
SV118-15.0	2-Butanone (MEK), Benzene, Toluene
SV121-5.0	2-Butanone (MEK), Benzene, Methylene chloride, Toluene
SV120-5.0	2-Butanone (MEK), Acetone, Benzene, Toluene
SV120-5.0-DUP	2-Butanone (MEK), Acetone, Benzene, Toluene
SV120-10.0	Benzene, Toluene
SV120-15.0	Benzene, Toluene
SV120-25.0	Benzene, Toluene
SV121-10.0	Benzene, Toluene
SV121-15.0	Benzene, Toluene
SV121-25.0	Benzene, Methylene chloride
SV119-10.0	Benzene, Toluene
SV119-15.0	Benzene, Toluene
SV119-25.0	2-Butanone (MEK), Benzene, Toluene
SV122-5.0	Benzene, Toluene
SV122-10.0	Benzene, Toluene
SV122-15.0	2-Butanone (MEK), Benzene, Methylene chloride, Toluene
SV122-25.0-DUP	Benzene, Methylene chloride, Toluene

Review of Data Quality Objectives (DQOs)

The project DQOs were evaluated to determine whether the quantitative and qualitative needs of the sampling and analysis program had been met. DQOs were evaluated using the qualitative data quality indicators comparability and representativeness; and using the quantitative data quality indicators precision, accuracy, completeness, and sensitivity. The data generated may not be considered fully achieved, but variances will trigger the appropriate QA/QC measures needed to evaluate and correct these activities, if necessary.

Comparability

Comparability evaluates whether the reported data are comparable with similar data reported by other organizations. The comparability of the laboratory results was found to be acceptable. The units were consistent and appropriate for the matrix sampled.

Comparability also involves comparing data to previous sampling events at the same locations. Results from the reporting period sampling event generally indicate good comparability with previous sampling events.

Representativeness

Representativeness is the reliability with which a measurement or measurement system reflects the true conditions under investigation (U.S. EPA 2008). Representativeness is influenced by the number and location of the sampling points, sampling timing and frequency of monitoring efforts, and the field and laboratory sampling procedures.

The representativeness of data was enhanced by the use of established field and laboratory procedures and their consistent application. Samples that were collected are considered to be representative of the location of sample collection.

Precision

Precision measures the reproducibility of repetitive measurements by assessing the RPD between field samples and field duplicate analyses, MS/MSD analyses, and field sample and laboratory duplicate analyses.

Accuracy

Accuracy is a statistical measurement of correctness and includes components of random error and systemic error.

Completeness

The completeness of the data is described as a ratio of the amount of data expected from the field program versus the amount of valid data actually received. Valid data are considered to be those data that have not been rejected (were not R-qualified) either from data validation or internal data review. Completeness can be expressed as the percentage of valid results relative to the total number of requested results.

Based on the data validation report, none of the results were rejected in the reporting period sampling event. The completeness of the sample sets submitted for analysis is 100 percent.

Sensitivity

Sensitivity is evaluated by determining if reporting limits are below applicable screening levels.

Overall Assessment

The data validation memo for Alexander Hamilton High School (September to December 2018, February 2019 to November 2019) had some quality control outliers.

Quality control results discussed issues in the method blank analysis, laboratory control samples, surrogate compound recovery, blank spike/black spike duplicate analyses, and matrix spike/matrix spike duplicate analyses. The Quality control outliers in the laboratory QA/QC samples did not qualify any sample data. A field duplicate sample was collected at a frequency of approximately 10%. The field duplicate sample analyses in the Alexander Hamilton High School reports had detected concentrations of various analytes in the primary and duplicate samples where the calculated RPD exceeded the acceptable limit of 30%.

For report 416329 sample EB-03 (lab # 416329-071) was extracted/analyzed past the holding time for TPH-diesel and TPH-motor oil.

The Compound Quantitation section of the data validation memo summarizes the following laboratory applied flags:

- B1 Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
- J Reported value estimated.
- D2 Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
- L The LCS or LCSD was out of control limits. Associated sample data was reported with qualifier.
- T Sample was extracted/analyzed past the holding time.
- R-07 Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

For reports T183211f, T183212f, and T183454f the reporting limit for several compounds was raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.

No trip blank samples were collected during these sampling events.

All soil and water data, as qualified, are acceptable for use.

SOIL VAPOR DATA VALIDATION

Review of Laboratory Reports

The data were reviewed in accordance with the National Functional Guidelines for Superfund Organic Methods Data Review, (January 2017; (USEPA-540-R-2017-002), with the National Functional Guidelines for Superfund Inorganic Methods Data Review, (January 2017; (USEPA-540-R-2017-001), Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control Board, and the San Francisco Regional Water Quality Control Board Advisory – Active Soil Gas Investigations (July 2015), the pertinent

methods referenced by the data package, and professional and technical judgment. Data verification and validation were performed in performed in general conformance with the Stage 2 validation described in the Guidance for Labelling Externally Validated Laboratory Analytical Data for Superfund Use (USEPA 2009).

For report ST-13880 and ST-14158, soil gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCV) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verification Duplicate (CCVD) was analyzed with each batch of soil gas samples.

For report ST-13007, indoor air samples were analyzed using EPA Method TO-15. Instrument CCV, QC Reference Standards, and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a MS and MSD were analyzed with each batch of Indoor Air Samples.

For report ST-12676 and ST-12616, soil gas samples were analyzed using EPA Method TO-15. Instrument CCV and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a CCVD was analyzed with each batch of soil gas samples.

For report ST-12571, Soil Gas samples were analyzed using EPA Method TO-15. Instrument Continuing Calibration Verification (CCVD) and Instrument Blanks were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verification Duplicate (CCVD) was analyzed with each batch of Soil Gas samples.

For report F-0180, F-0173, F-0170, D-1648, and D-1552 Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). CCV, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. All samples were injected into the GC/MS system within 30 minutes of sampling.

Data Package Completeness

The data packages included the required elements of a chain-of-custody, case narrative, results, and QC results. A sample receipt and case narrative were not provided with the analytical laboratory reports. The laboratory project managers were contacted directly, and confirmed that all samples were received intact, in the correct containers, appropriately labeled and preserved.

Verification of Electronic Data Deliverable to Hardcopy Data Package

Sample results and related quality control data were received in both an electronic and hardcopy format.

Chain of Custody

All sample identification (ID) numbers listed on the chain-of-custody record are consistent with the sample ID reported in the laboratory electronic data deliverable (EDD) and hardcopy data package.

Sample Preservation

Soil vapor samples were received with laboratory vacuums ranging from -4.0 to -1.0 inches of mercury ("Hg"). Samples SV04D, SV111-5.0, SV60-15.0, SV59-15' were received by the laboratory with a vacuum

difference of greater than one inch of mercury. A field pressure was not recorded for sample B64-29', therefore vacuum difference could not be calculated. The other samples mentioned above were received by the laboratory with a vacuum difference of less than one inch of mercury. Proper preservation includes samples are received by the laboratory with a vacuum pressure and less than 1" Hg differential between the field vacuum reading and the laboratory received vacuum reading.

For the mobile lab (D- and F-) jobs, summa canisters were not used, so there is not a recorded vacuum pressure reading. The soil gas is pulled from the probe using a glass syringe, and then injected directly into the instrument. This includes lab reports F-0170, F-0180, F-0170, F-0173, D-1552, D-1648.

The table below shows the samples received by the laboratory with a vacuum reading in inches of mercury (Hg) along with the corresponding field vacuum readings:

Client Sample ID	Jones ST Number	SUMA ID	Received Pressure ("Hg)	Field Pressure ("Hg)
SV04D-15.5	ST-13880-01	NA	-2.5	-4
SV111-5.0	ST-13880-02	NA	-1	-4
SV60-15.0	ST-13007-01	NA	-3	-5
B64-29'	ST-12676-01	NA	-2	--
SV53-5.0'	ST-12616-01	NA	-4	-5
SV59-15.0'	ST-12571-01	NA	-2	-5
SV113-5.0	ST-14158-01	O1201	-4	-4
SV113-15.0	ST-14158-02	O1184	-3	-3
SV114-5.0	ST-14158-03	B2417	-4	-4
SV114-15.0	ST-14158-04	O1180	-2	-2
SV115-5.0	ST-14158-05	B2438	-3	-3
SV115-15.0	ST-14158-06	1513B	-3	-3
SV116-5.0	ST-14158-07	1489	-2	-2
SV116-15.0	ST-14158-08	O1156	-3	-3
SV116-15.0-REP	ST-14158-09	O1220	-4	-4

Notes:

-- = Not measured
NA = Not available

Holding Times

Samples were analyzed within the proper holding times.

Method Blank Analysis

In report TP112619-11 methylene chloride (dichloromethane) was detected above the laboratory reporting limit. Associated sample detections for methylene chloride (dichloromethane) were qualified by the laboratory with a B flag.

No target compounds were detected in the method blank samples.

Laboratory Control Samples

Laboratory control sample analysis was performed per batch of 20 or fewer samples. All the percent recovery values for laboratory control samples (LCS) were within acceptable criteria established by the laboratory for the respective testing methods.

For report TP112619-11 the LCS and/or LCSD recoveries fell above the established control specifications for dichlorodifluoromethane (F12). Dichlorodifluoromethane (F12) was not detected in any of the samples, therefore, no results were qualified.

Laboratory control sample (LCS) analysis was not performed for report ST-13880, ST-13007, ST-12676, ST-12616, ST-12571, and ST-14158. Precision was evaluated using the method blank.

Surrogate Compound Recovery

All percent recovery values for surrogate compounds were within acceptable criteria established by the laboratory for the respective testing methods.

Sample Duplicate Analysis

Sample duplicate analysis was not performed for reports ST-13880 or ST-14158.

Laboratory sample duplicate analysis was performed per batch of 20 or fewer samples. For all the detected compounds, calculated RPDs were within the accepted 25% limit established by the laboratory.

Blank Spike/Blank Spike Duplicate Analyses

Blank spike/blank spike duplicate analysis is not performed for air sampling.

Matrix Spike/Matrix Spike Duplicate Analyses

Matrix spike and matrix spike duplicate sample analyses are not performed for air sampling.

Trip Blank Sample Analysis

Trip blanks are not collected for soil gas/indoor air samples.

Equipment Blank Sample Analysis

Equipment blanks are not collected for soil gas/indoor air samples.

Field Replicate Analysis

The tables below show the detected concentrations of various analytes in the primary and duplicate samples, respectively, with the calculated RPD. Results in bold have RPD's that exceed the acceptable limit of 30%. Results are specified by the lab report header. The analytes are not listed in the table if both the primary and duplicate sample results were ND for non-detect. RPD could not be calculated where either the primary or the duplicate result was ND and RPD is reported as NC for not calculated.

Report D-1152:

Analyte	Units	SV62-5.0	SV62-5.0 REP	RPD
p-isopropyltoluene	µg/m3	11.0	10.0	10

Report D-1648:

Analyte	Units	SV110-15.5	SV110-15.5 REP	RPD
Benzene	µg/m3	240	232	3
Ethylbenzene	µg/m3	509	487	4
n-Propylbenzene	µg/m3	45	45	0
Toluene	µg/m3	2690	2540	6
1,2,4-Trimethylbenzene	µg/m3	174	171	2
1,3,5-Trimethylbenzene	µg/m3	67	65	3
m,p-Xylene	µg/m3	2060	1980	4
o-Xylene	µg/m3	561	544	3

Report F-0170:

Analyte	Units	SV01-15.0'	SV01-15.0' REP	RPD
Toluene	µg/m3	29.0	26.0	11

Report F-0173:

Analyte	Units	SV65-15.0'	SV65-15.0' REP	RPD
p-isopropyltoluene	µg/m3	570.0	496.0	14
sec-butylbenzene	µg/m3	38.0	33.0	14
tert-Butylbenzene	µg/m3	55.0	46.0	18

Report ST-14158:

Analyte	Units	SV116-15.0’	SV116-15.0’ REP	RPD
Acetone	µg/m3	**137**	**34.5**	**120**
Acrolein	µg/m3	2.0	2.4	18
Benzene	µg/m3	2.0	2.1	5
2-Butanone (MEK)	µg/m3	**4.9**	**7.6**	**43**
n-Butylbenzene	µg/m3	<1.0	1.4	**NC**

Carbon Disulfide	µg/m3	**4.9**	**6.8**	**32**
Cyclohexane	µg/m3	1.1	<1.0	0
Ethyl Acetate	µg/m3	**12.7**	**17.6**	**32**
Ethylbenzene	µg/m3	**4.6**	**3.1**	**39**
4-Ethyltoluene	µg/m3	**2.7**	**1.9**	**35**
Freon 11	µg/m3	1.5	1.8	18
Freon 12	µg/m3	2.5	2.6	4
2-Hexanone (MBK)	µg/m3	1.3	<1.0	**NC**
Isopropanol	µg/m3	3.0	1.6	NC
Isopropylbenzene	µg/m3	<1.0	1.0	**61**
4-Isoporpyltoluene	µg/m3	**14.8**	**20.5**	**32**
4-Methyl-2-pentanone (MIBK)	µg/m3	1.6	1.8	12
Methylene chloride	µg/m3	**3.9**	**1.0**	**118**
Naphthalene	µg/m3	9.5	<5.0	**NC**
n-Propylbenzene	µg/m3	**2.2**	**1.3**	**51**
Styrene	µg/m3	1.3	1.4	7
Tetrachloroethene	µg/m3	**2.4**	**4.0**	**50**
Toluene	µg/m3	**15.7**	**11.2**	**33**
Propylene	µg/m3	**5.9**	**9.3**	**45**
1,2,4-Trimethylbenzene	µg/m3	**13.2**	**6.8**	**64**
1,3,5-Trimethylbenzene	µg/m3	<1.0	2.3	**NC**
m+p-Xylene	µg/m3	**19.6**	**12.5**	**44**
o-Xylene	µg/m3	**9.2**	**3.8**	**83**

Report TP112619-11:

Analyte	Units	SV118-25	SV118-25-Rep	RPD
1,2,4-trimethylbenzene	µg/m3	**<5.0**	**7**	**33**
Chloroform	µg/m3	9.5	9.5	0
Dichloromethane	µg/m3	11	11	0
Tetrachloroethene	µg/m3	10	13	26
Toluene	µg/m3	**7.1**	**10**	**34**
Xylene (m & p)	µg/m3	**9.3**	**15**	**47**
Xylene (o)	µg/m3	<4.4	4.7	NC

Analyte	Units	SV118-5	SV118-5-Rep	RPD
1,2,4-trimethylbenzene	µg/m3	<5.0	5.3	**NC**
Toluene	µg/m3	**<3.8**	**8**	**NC**

Analyte	Units	SV122-5	SV122-5-Rep	RPD
1,2,4-trimethylbenzene	µg/m3	6.1	6.3	3
Toluene	µg/m3	4.5	4.4	2

Dilution Factors

Report ST-13007 had dilution factor of 1/10 for propylene but was within acceptable criteria. All other dilution factors were within acceptable criteria established by the laboratory for the respective testing methods.

Compound Identification and Quantitation

The laboratory applied the following flags to report TP112619-11:

B Analyte is found in the associated blank as well as in the sample.

Results for the following samples/analytes were B-flagged:

Sample	B-Flagged Analytes (Report TP112619-11)
SV117-25.0	Methylene chloride (dichloromethane)
SV117-15.0	Methylene chloride (dichloromethane)
SV118-25.0	Methylene chloride (dichloromethane)
SV118-25.0-Rep	Methylene chloride (dichloromethane)
SV118-15.0	Methylene chloride (dichloromethane)
SV118-10.0	Methylene chloride (dichloromethane)
SV119-25.0	Methylene chloride (dichloromethane)
SV119-15.0	Methylene chloride (dichloromethane)
SV119-10.0	Methylene chloride (dichloromethane)
SV120-25.0	Methylene chloride (dichloromethane)
SV120-15.0	Methylene chloride (dichloromethane)
SV120-10.0	Methylene chloride (dichloromethane)
SV121-25.0	Methylene chloride (dichloromethane)
SV121-15.0	Methylene chloride (dichloromethane)
SV121-10.0	Methylene chloride (dichloromethane)
SV122-25.0	Methylene chloride (dichloromethane)
SV122-15.0	Methylene chloride (dichloromethane)
SV122-10.0	Methylene chloride (dichloromethane)
SV117-5.0	Methylene chloride (dichloromethane)
SV117-10.0	Methylene chloride (dichloromethane)

The laboratory applied no flags to any of the other analytes for the other reports.

Review of Data Quality Objectives (DQOs)

The project DQOs were evaluated to determine whether the quantitative and qualitative needs of the sampling and analysis program had been met. DQOs were evaluated using the qualitative data quality indicators comparability and representativeness; and using the quantitative data quality indicators precision, accuracy, completeness, and sensitivity. The data generated may not be considered fully achieved, but variances will trigger the appropriate QA/QC measures needed to evaluate and correct these activities, if necessary.

Comparability

Comparability expresses the confidence with which one data set can be compared to another.

Representativeness

Representativeness is the degree to which data accurately and precisely represent the actual site conditions.

Precision

Precision measures the reproducibility of repetitive measurements by assessing the RPD between field samples and field duplicate analyses, MS/MSD analyses, and field sample and laboratory duplicate analyses.

Accuracy

Accuracy is a statistical measurement of correctness and includes components of random error and systemic error.

Completeness

Completeness is the amount of valid data obtained compared to the amount expected under ideal conditions.

Sensitivity

Sensitivity is evaluated by determining if reporting limits are below applicable screening levels.

Overall Assessment

All soil vapor data, as qualified, are acceptable for use.

APPENDIX F
WASTE DISPOSAL MANIFESTS

Manifest

SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
	Transporter		A07	50466	001

Generator and/or Consultant

Generator's Name and Billing Address: Los Angeles Unified School District 333 South Beaudry Ave., 21st Floor Los Angeles, CA 90017	Generator's Phone #: Person to Contact: FAX#:	Customer Account Number
Consultant's Name and Billing Address:	Consultant's Phone #: Person to Contact: FAX#:	Customer Account Number
Generation Site (Transport from): *(name & address)* Hamilton High School 2955 S Robertson Blvd. Los Angeles, CA 90034	Site Phone #: Person to Contact: FAX#:	
Designated Facility (Transport to): *(name & address)* Soil Safe 12328 Hibiscus Rd. Adelanto, CA 92301-1700	Facility Phone #: (800) 862-8001 Person to Contact: Joe Provenzal FAX#: (760) 246-8004	
Transporter Name and Mailing Address: American Integrated Services, Inc. P.O. Box 92316 Long Beach, CA 90809-2316	Transporter's Phone #: (310) 522-1168 Person to Contact: Jennifer Sherman FAX#: (310) 522-0474	CAR000146338 Customer Account Number 7704808

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑	2	55 - GAL DRUMS			
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑					

List any exception to items listed above: AIS Project # 39008-31-10

Scale Ticket #

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☑ Consultant ❑ STEVEN Morrill, LAUSD

Signature and date: [signature] Month 6 Day 10 Year 19

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: ALONZO DELGADO

Signature and date: [signature] Month 6 Day 11 Year 19

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. Provenzal

Signature and date:

Please print or type.

GENERATOR/CONSULTANTS COPY

98545

American Integrated Services, Inc.

P.O. BOX 92316 LONG BEACH, CA. 90809
Office 310-522-1168 Fax 310-522-1182
24 Hour Emergency Hotline 888-423-6060

TRANSPORTATION WORK ORDER

CUSTOMER NAME: Stephen Eng	**JOB #** 39009-31-10	**DATE:** 06-1-19
JOBSITE: Hamilton High school		**CONTACT:**
ADDRESS: 2955 S Robertson Blvd.		**CUSTOMER P.O.:**
CITY: Los Angeles CA		

EQUIPMENT:	**Manifest# :**	**Disposal Location:**
☐ LOWBOY **TRUCK #** 531		[illegible]
☐ ROLL – OFF ☐ BOX VAN **TRAILER #**_____		
☐ VAC TRUCK ☐ STAKE BED		
☐ _____		

Bin #:	**Pickup / Deliver √**	**Return / Destination √**	**BIN LINERS:**
			☐ **USED**
			__**How many**
			☐ **NOT USED**
			Tarps:
			☐ **Yes**
			☐ **No**

On Site Start	Stop	**DESCRIPTION**
0730	0800	drive to Hamilton High school LA
0800		pickup 2 soil drums

REPORTING TIME	**ENDING TIME**	**TOTAL TIME**	**DEDUCTIBLE TIME**	**NET TIME**
0730				

X _____
DRIVER

X _____
CUSTOMER SIGNATURE

White - Billing • Green - Time Sheet • Yellow - Office • Pink - Driver • Gold - Customer

Manifest

SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
	Transporter		A07	51446	001

Generator and/or Consultant

Generator's Name and Billing Address:
Los Angeles Unified School District
333 South Beaudry Ave., 21st Floor
Los Angeles, CA 90017

Generator's Phone #:
Person to Contact:
FAX#:
Customer Account Number

Consultant's Name and Billing Address:

Consultant's Phone #:
Person to Contact:
FAX#:
Customer Account Number

Generation Site (Transport from): *(name & address)*
Hamilton High School
2955 S Robertson Blvd.
Los Angeles, CA 90034

Site Phone #:
Person to Contact:
FAX#:

Designated Facility (Transport to): *(name & address)*
Soil Safe
12328 Hibiscus Rd.
Adelanto, CA 92301-1700

Facility Phone #: (800) 862-8001
Person to Contact: Joe Provansal
FAX#: (760) 246-8004

Transporter Name and Mailing Address:
American Integrated Services, Inc.
P.O. Box 92316
Long Beach, CA 90809-2316

Transporter's Phone #: (310) 522-1168
CAR000148338
Person to Contact: Jennifer Sherman
FAX#: (310) 522-0474
Customer Account Number 7704908

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐	4		33960	31660	2300
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					1.14

List any exception to items listed above:
AIS Project # 40009-31-10

Scale Ticket # 159259

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☐ Consultant ☒
Agent For LAUSD Wes Skillings

Signature and date: Wes Skillings Agent For LAUSD
Month 2 Day 19 Year 20

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Eddie Lino

Signature and date: Eddie Lino
Month 2 Day 19 Year 20

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. Provansal

Signature and date: 2-28-20

Please print or type.

FACILITY COPY

Soil Safe of California, Inc.

ADE 159259

12328 Hibiscus Ave. Adelanto, CA 92301

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professional Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Manifest Number: A5-1446 Load #: 1 2/28/2020

Generator Site Information:

Hamilton High School

2955 South Robertson Boulevard

Los Angeles, Ca 90034

Weighmaster Weighed at:

SOIL SAFE OF CALIFORNIA, INC..

12328 HIBISCUS AVE

ADELANTO, CA 92301

			Lbs	Tons	
Joe Provansal	**Time In:** 8:20:09 AM	**Gross Weight:**	32960	16.48	Manual Wt
Joe Provansal	**Time out:** 8:20:10 AM	**Tare Weight:**	30680	15.34	Manual Wt
		Net Weight:	2280	1.14	

Truck Number: 551

Trailer Number: 214

Commodity: Non Haz - Solids

Driver on Gross and Tare Transporter: Ais - Alonzo

APPENDIX G
ARSENIC BACKGROUND CONCENTRATION DERIVATION

TECHNICAL MEMORANDUM

To:
Clare Steedman, PG
Senior Associate Geologist, Terraphase
18401 Von Karman Avenue, Suite 410
Irvine, California 92612

cc:
Darren Croteau, PG
Principal Geologist, Terraphase
18401 Von Karman Avenue, Suite 410
Irvine, California 92612

From:
Rachel Whitson, Risk Assessment Consultant, Terraphase
Kevin Long, Principal Consultant, Terraphase

Date:
March 20, 2019

Project Number:
S030.008.004

Subject: Site-Specific Arsenic Assessment for LAUSD Alexander Hamilton High School

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We have reviewed the arsenic soil sampling results with consideration for the methodologies presented in CalEPA DTSC's January 2009 Arsenic Strategies Determination of Arsenic Remediation, Development of Arsenic Cleanup Goals. Our review would suggest that a site cleanup goal of 28 mg/kg could be proposed for the Site. The following is a brief overview of the analysis performed and the associated results which support this proposed cleanup goal for arsenic. This included performing both a simple graphical determination as well as a statistical determination. The graphical determination resulted in an estimated cleanup goal for arsenic of 25 mg/kg. The statistical determination resulted in an estimated cleanup goal for arsenic of 28 mg/kg. Since both methodologies are supported by this guidance, we would recommend proposing the use of the higher of these two results = 28 mg/kg.

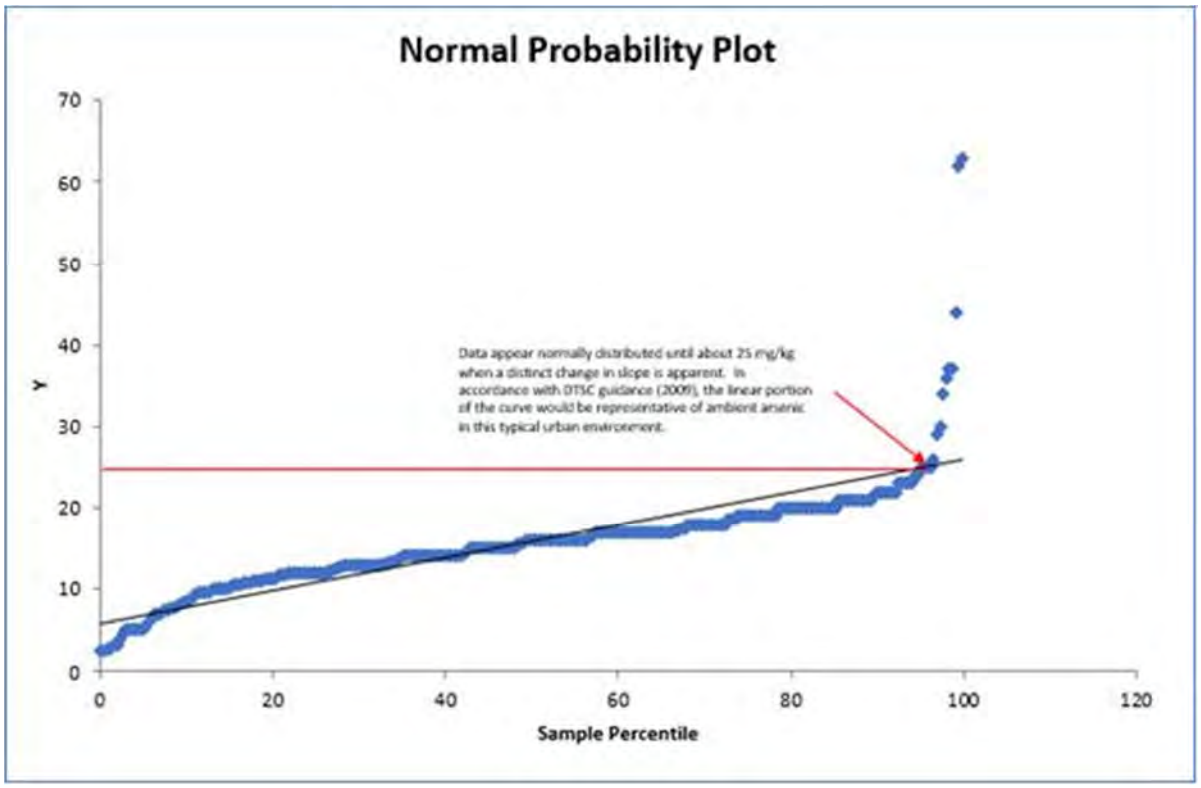
We did review the sensitivity of these outcomes when considering (1) all of the arsenic data and (2) only data representative of fine soil - the results were similar in both cases.

Simple Graphical Determination

1. Calculated basic statistics for the arsenic data.

Statistic	Value	Units
Number of Samples	274	--
Min Conc	3	mg/kg
Max Conc	63	mg/kg
Mean Conc	16	mg/kg
Median Conc	16	mg/kg
Standard Deviation	7.1	--

2. Produced a normality plot of the raw arsenic data



3. In accordance with the DTSC guidance, 25 mg/kg would represent the upper-bound of ambient arsenic in soil at the Site and could serve as the clean-up goal.

Statistical Determination

4. Identified statistically significant outliers in the data set. Overall, out of the 274 results, 8 were identified as statistically significant outliers. These samples exhibited concentrations ranging from 30 to 63 mg/kg.

5. After removing these outliers, the data set was tested to determine if the underlying distribution (without outliers) was normally distributed. The results confirmed that the distribution was normally distributed.

6. Calculated the 95% upper confidence limit (UCL) on the 99th percentile for this data set = 28 mg/kg. In accordance with the DTSC guidance, 28 mg/kg would represent the upper-bound of the ambient arsenic in soil at the Site and could serve as the clean-up goal.

APPENDIX H
HEALTH SCREENING RISK EVALUATION

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H.1 INTRODUCTION

Terraphase Engineering Inc. (Terraphase) performed a human health screening risk evaluation, in accordance with the California Environmental Protection Agency Department of Toxic Substances Control's (DTSC) October 2015 *Preliminary Endangerment Assessment Guidance Manual*, to help support a Preliminary Endangerment Assessment - Equivalent (PEA-E) for the Alexander Hamilton High School located at 2955 South Robertson Boulevard in Los Angeles, California (the Site). The screening evaluation involved the comparison of chemical concentrations in soil and soil gas, observed in samples collected from the Site during the field activities performed in 2018 through 2019, to conservative risk-based screening levels. Additionally, conservative estimates of the site-related cumulative cancer and noncancer risk for exposure of receptors to chemicals of potential concern (COPC) in soil and soil gas were calculated.

This appendix presents the methodology and results of the screening risk evaluation.

H.2 SCENARIOS FOR POTENTIAL HUMAN EXPOSURE

This section provides a brief overview of the applicable scenarios for potential human exposure to site-related COPCs. Section H.2.1 discusses the identification of COPCs. Section H.2.2 discusses the potentially exposed populations, while Section H.2.3 discusses the relevant exposure pathways for each of the identified receptors. Overall, two specific exposure scenarios have been evaluated in this screening risk evaluation – soil direct contact and vapor intrusion.

Direct contact with soil is assumed to involve incidental ingestion of, and dermal contact with soil and inhalation of soil-derived particulates and vapors. In this screening risk evaluation, this exposure scenario has been evaluated using conservative generic risk-based screening levels that are based upon residential[1] soil direct contact exposure, in accordance with DTSC guidance (2015).

Vapor intrusion involves the potential migration of volatile chemicals in soil and/or groundwater through the foundations and buildings and into indoor air. In this screening risk evaluation, this exposure scenario has been evaluated using conservative generic risk-based screening levels that are based upon residential vapor intrusion exposure, in accordance with DTSC guidance (2015).

H.2.1 Chemicals of Potential Concern

In order to streamline the screening risk evaluation, any chemical detected in soil and soil gas at the Site were conservatively selected as a COPC, regardless of whether that chemical exceeded screening levels. Based upon the available site characterization data, metals[2], pesticides and volatile organic chemicals (VOCs) were detected in soil and soil gas at the Site, summarized in Table H-1.

As further described in Section H.3.2, soil sampling locations with arsenic and lead concentrations above the arsenic cleanup goal or lead screening level will be remediated (e.g., excavated and replaced with clean soil). Therefore, while arsenic and lead are considered COPCs, because it is expected that remedial action will be performed to address soil concentrations for these COPCs above these conservative levels, arsenic and lead are not included in the quantitative risk calculations. As such, the soil risk calculation results presented in this evaluation can be considered representative of “post-remedy” conditions.

H.2.2 Current and Future Land Use and Potentially Exposed Populations

As discussed in Section 1.1 of the PEA Report, the Site is approximately 20.8 acres in size and is developed with the Alexander Hamilton High School campus. The Site is owned and operated by the Los Angeles Unified School District (LAUSD). Buildings at the Site include four classroom buildings, portable classrooms, photography building, arts building, storage structures, two gymnasiums, cafeteria, and assembly hall. Other developments on the Site include an outdoor track and football field, parking

[1] While on-site residential land use is not a current or reasonably expected land use, generic risk-based screening levels are used as a conservative surrogate to the receptor populations that would be expected to be present at the school (i.e., educators, school staff, students, maintenance workers, and trespassers).

[2] For this evaluation, chromium (total) concentrations were assumed to be trivalent chromium (Cr III) and not hexavalent chromium (Cr VI) given the lack of a source that would have resulted in the presence of Cr VI at this Site.

structure with elevated tennis courts, baseball field and paved parking areas. The northwest portion of the Site is developed with Cheviot Hills Continuing School.

The Site is bounded by residential areas to the north, west and south, and mixed use (residential and commercial) to the east.

Under current and reasonably expected future land use, potentially exposed populations at and around the Site include high school students, adult educators and staff employed by the school, maintenance workers, construction workers, trespassers and off-site residents.

H.2.3 Exposure Pathways

H.2.3.1 On-Site

High School Students

High school students would be present on-site while attending school.

During their time outdoors, students could be exposed to soil in unpaved or uncovered areas. Potential routes of exposure to surface soil would include incidental ingestion, dermal contact, and inhalation of soil vapor and airborne particulates. While outside, students could also be exposed via inhalation of chemicals from subsurface soil or shallow groundwater, where present, if VOCs were to volatilize and migrate to the outdoor air.

During their time indoors, students could be exposed via the inhalation of volatile chemicals from subsurface soil or shallow groundwater, where present, if these chemicals were to volatilize and migrate through cracks in building foundations into indoor air.

Adult Educators and School Staff

As with the students, while outside adult educators and school staff could be exposed to soil in unpaved or uncovered areas. Potential routes of exposure to surface soil would include incidental ingestion, dermal contact, and inhalation of soil vapor and airborne particulates. While outside, staff could also be exposed via inhalation of chemicals from subsurface soil or shallow groundwater, where present, if VOCs were to volatilize and migrate to the outdoor air.

During their time indoors, adult educators and school staff could also be exposed via the inhalation of volatile chemicals from subsurface soil or shallow groundwater, where present, if these chemicals were to volatilize and migrate through cracks in building foundations into indoor air.

Maintenance Workers

Workers who perform occasional maintenance activities (e.g., landscaping, repair of underground utilities, etc.) of limited size and duration at the Site could be exposed to COPCs in soil. Potential routes of exposure to surface and subsurface soil during such activities would include incidental ingestion, dermal contact, and inhalation of soil vapor and airborne particulates.

Construction Workers

In the future, should portions of the Site be subject to construction or redevelopment, construction workers could be exposed to COPCs in soil. Potential routes of exposure to surface and subsurface soil during such activities would include incidental ingestion, dermal contact, and inhalation of soil vapor and airborne particulates.

Trespassers

While trespasser exposures at the Site are generally expected to be limited in duration and extent, trespassers could be exposed to soil in unpaved or uncovered areas of the Site. Potential routes of exposure to surface soil would include incidental ingestion, dermal contact, and inhalation of soil vapor and airborne particulates. Trespassers could also be exposed via inhalation of chemicals from subsurface soil or shallow groundwater, if VOCs were to volatilize and migrate to the outdoor air.

H.2.3.2 Off-Site

Residents

Off-site residents could be exposed to COPCs in soil and soil gas via inhalation of chemicals in vapor and/or particulates emitted from on-site soil at uncovered areas of the Site, if these emissions were to migrate in the direction of off-site residences. In the paved or covered areas, exposure to COPCs via inhalation would be significantly reduced since the pavement will prevent significant emissions.

H.3 HUMAN HEALTH SCREENING EVALUATION

This section presents the results of the human health screening evaluation. Section H.3.1 discusses the exposure pathways and media of concern. Section H.3.2 discusses the COPC and exposure concentrations. Section H.3.3 discusses the risk-based screening levels used in this evaluation. Section H.3.4 provides the preliminary screening results. Section H.3.5 provides the results of the risk characterization, and Section H.3.6 discusses the evaluation of lead concentrations in soil.

H.3.1 Exposure Pathways and Media of Concern

Section H.2 provides a summary of the possible human receptors that would have the potential for exposure to COPC in soil and soil gas at the Site under current or reasonably anticipated future land use. As noted above, while several potential receptors are discussed, in order to evaluate potential soil direct contact exposures, this screening evaluation utilizes conservative generic risk-based screening levels that are based upon residential direct contact exposure to COPCs in soil (i.e., incidental ingestion, dermal contact, and inhalation of particulates and vapors) and vapor intrusion exposure (i.e., indoor inhalation exposure) to soil gas concentrations. The results of these evaluations should be considered as conservative surrogates for the other potential receptor populations detailed in Section H.2.2.

H.3.2 Chemicals of Potential Concern and Exposure Concentrations

To streamline the risk assessment, exposure concentrations for soil and soil gas were conservatively assumed to be equal to the maximum detected concentrations at each a location, regardless of sampling depth.

Per LAUSD's plans for the Site, soil sampling locations exhibiting arsenic concentrations above 28 mg/kg[3] or lead concentrations above 80 mg/kg[4] will be subject to remedial action. In conducting the quantitative risk calculations, locations with arsenic or lead concentrations exceeding these values were assumed to be remediated (e.g., excavated and replaced with clean soil). The locations where soil remedial action is assumed are shown in Figures H-1 and H-2.

As discussed in Section H.2.1, Table H-1 provides a list of the COPC.

H.3.3 Generic Risk-Based Screening Levels

In evaluating soil direct contact exposures, generic risk-based screening levels were used that are based upon DTSC's (2020) HHRA Note 3, Modified Screening Levels for Residential Soil. For any COPC not included in this source, the risk-based screening levels were based upon USEPA's Regional Screening

[3] Terraphase. 2019. Preliminary Endangerment Assessment – Equivalent, Appendix G: Site-Specific Arsenic Assessment for LAUSD Alexander Hamilton High School. March.
[4] DTSC. 2020. Human Health Risk Assessment (HHRA) Note Number: 3, DTSC-Modified Screening Levels for Residential Soil. April.

Levels for Residential Soil (at a target cancer risk level of $1x10^{-6}$ and noncancer hazard quotient (HQ) of 1)[5].

In evaluating vapor intrusion exposures, generic risk-based screening levels used for soil gas in this evaluation were based upon DTSC's (2020) HHRA Note 3, Modified Screening Levels for Residential Air, conservatively attenuated by a generic default factor of 0.002. The attenuation factor conservatively reflects the amount of attenuation in concentration from subslab soil gas to indoor air due to vapor intrusion. For any COPC not included in this source, the risk-based screening levels used were based upon USEPA's Regional Screening Levels for Residential Air (at a target cancer risk level of $1x10^{-6}$ and noncancer hazard quotient (HQ) of 1), also conservatively attenuated by a factor of 0.002.

H.3.4 Preliminary Screening Results

As presented on Table H-2, none of the COPCs in soil exhibited concentrations above conservative generic risk-based screening levels.

As presented on Table H-3, concentrations of COPCs in soil gas at 8 locations were greater than the generic residential risk-based soil gas screening levels. This included benzene (i.e., at locations B55, B56, B110, B112, B117, B121), 1,2-dichloroethane (12DCA) (i.e., at location B62), ethyl benzene (i.e., at locations B55, B117), naphthalene (i.e., at locations B56) and tetrachloroethene (PCE) (i.e., at location B04). All other COPCs in soil gas exhibited concentrations below these conservative residential generic risk-based screening levels.

H.3.5 Risk Characterization

As presented in Tables H-2 and H-3, upper-bound estimates of single-chemical cancer risks and noncancer hazard quotients (HQ) for receptors were conservatively calculated by scaling the maximum detected soil and soil gas concentrations, respectively, at each location by the cancer and noncancer-based screening levels. These single-chemical cancer risks and noncancer HQs for soil and soil gas were then added to estimate the upper-bound cumulative cancer risk and noncancer HI at each location.

Table H-4 presents the upper-bound cumulative cancer risk and noncancer HI estimates for each of the soil sampling locations. As shown, none of the locations exhibited concentrations that would result in cumulative risk or HI estimates that would be greater than the risk management goals used by DTSC to determine when risk management action is warranted (DTSC 2015) (i.e., specifically, a cumulative cancer risk less than or equal to $1x10^{-6}$ and noncancer HI less than or equal to 1). Figure H-3 presents the locations of each soil sampling point.

Table H-5 presents the upper-bound cumulative cancer risk and noncancer HI estimates for vapor intrusion exposure to COPC concentrations at each of the soil gas sampling locations. Figure H-4 presents the locations of each soil gas sampling point and identifies those with risk or HI estimates in

[5] The USEPA RSL for thallium was not used since it is based upon a Provisional Peer-Reviewed Toxicity Value (PPRTV) Appendix (Screening Value) toxicity value. USEPA says that these toxicity values are "*not defensible as the primary drivers in making cleanup decisions because they are based on limited information*" (USEPA 2009, 2012). As noted in USEPA's (2010) Provisional Peer-Reviewed Toxicity Values for Thallium Compounds, "*it is inappropriate to derive a subchronic or chronic p-RfD*" because of inadequate information and studies that are of poor quality (USEPA 2012).

excess of the risk management goals. As shown on Table H-5 and Figure H-4, 8 locations (i.e., B04, B55, B56, B62, B110, B115, B117, and B121) exhibited cumulative cancer risk estimates above the risk management goal of $1x10^{-6}$. Noncancer HI estimates at all of the soil gas sampling locations were less than or equal to the risk management goal of 1. As shown on Table H-3, these potentially unacceptable cumulative cancer risk estimates were predominately driven by detected concentrations of benzene, bromodichloromethane, dibromochloromethane, 12DCA, ethyl benzene, naphthalene and PCE. Based upon this conservative modeling, further consideration for vapor intrusion risk management action at these locations would be warranted.

H.3.6 Lead

As discussed in Section H.3.2, the soil sampling locations with lead concentrations above the generic risk-based screening level of 80 mg/kg will be removed and replaced with clean soil, per LAUSD's plans for the Site. Therefore, receptor exposure to lead in soil at the Site would not result in unacceptable exposure following this action.

H.4 RISK MANAGEMENT

As presented in Section H.3, there are no locations exhibiting COPC concentrations that would result in unacceptable cumulative cancer risks or noncancer HIs for receptors exposed to soil via direct contact. Based upon these conservative estimates, with the exception of the planned remedial action to address arsenic and lead concentrations in soil at select locations, additional risk management action would not be warranted to address soil direct contact exposures at the Site.

Also, as presented in Section H.3, conservative estimates of cumulative cancer risk and noncancer HI for receptors exposed to soil gas via vapor intrusion at 8 sampling locations were greater than DTSC's recommended risk management goals for determining the need for risk management action. Further consideration for remedial action at these locations would be warranted. This may include (1) additional sampling and/or further assessment to refine the conservative quantitative risk estimates presented in this evaluation, or (2) remedial action to reduce COPC concentrations in these areas or to eliminate/mitigate vapor intrusion exposure to receptors.

H.5 SUMMARY AND CONCLUSIONS

Terraphase performed a conservative human health screening risk evaluation, in accordance with the Department of Toxic Substances Control's (DTSC) October 2015 PEA Guidance Manual, to help support a PEA-E for the Site.

The screening evaluation involved the comparison of soil and soil gas concentrations to conservative risk-based screening levels and calculating conservative estimates of the cumulative cancer and noncancer risk for exposure of receptors to COPC.

As presented in Section H.3, following the planned implementation of soil remedial action at select locations to address potential direct contact exposures to areas with elevated arsenic and lead concentrations, conservative estimates of cumulative cancer risk and noncancer HI due to direct contact exposure to COPCs in soil were equal to or below DTSC's risk management goals. As such, additional risk management action to address potential direct contact exposures to soil at the Site would not be warranted.

Cumulative cancer risk estimates due to vapor intrusion exposure at 8 locations were greater than DTSC's recommended risk management goals, and as discussed in Section H.4, additional assessment and/or remedial action at these locations would be warranted.

H.6 REFERENCES

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TABLES

Table H-1
Chemicals of Potential Concern
Alexander Hamilton High School, Los Angeles, CA

Chem Group	Chemical	CASRN	Soil	Soil Gas
INORG	Antimony	7440-36-0	Y	-
INORG	Arsenic	7440-38-2	Y	-
INORG	Barium	7440-39-3	Y	-
INORG	Cadmium	7440-43-9	Y	-
INORG	Chromium (total)	7440-47-3	Y	-
INORG	Cobalt	7440-48-4	Y	-
INORG	Copper	7440-50-8	Y	-
INORG	Lead	7439-92-1	Y	-
INORG	Mercury	7439-97-6	Y	-
INORG	Molybdenum	7439-98-7	Y	-
INORG	Nickel	7440-02-0	Y	-
INORG	Selenium	7782-49-2	Y	-
INORG	Thallium	7440-28-0	Y	-
INORG	Vanadium	7440-62-2	Y	-
INORG	Zinc	7440-66-6	Y	-
PDIST	Diesel Range Organics	DRO	Y	-
PDIST	Motor Oil	M-OIL	Y	-
PEST	gamma-BHC	58-89-9	Y	-
PEST	Chlordane (total)	57-74-9	Y	-
PEST	4,4'-DDD	72-54-8	Y	-
PEST	4,4'-DDE	72-55-9	Y	-
PEST	4,4'-DDT	50-29-3	Y	-
PEST	Dieldrin	60-57-1	Y	-
PEST	Heptachlor epoxide	1024-57-3	Y	-
SVOC	Hexachlorobutadiene	87-68-3	N	Y
SVOC	Naphthalene	91-20-3	N	Y
VOC	Acetone	67-64-1	Y	Y
VOC	Acrolein	107-02-8	-	Y
VOC	Benzene	71-43-2	Y	Y
VOC	Bromodichloromethane	75-27-4	N	Y
VOC	Bromoform	75-25-2	N	Y
VOC	1,3-Butadiene	106-99-0	-	Y
VOC	2-Butanone	78-93-3	Y	Y
VOC	n-Butylbenzene	104-51-8	N	Y
VOC	sec-Butylbenzene	135-98-8	N	Y
VOC	tert-Butylbenzene	98-06-6	N	Y
VOC	Carbon Disulfide	75-15-0	-	Y
VOC	Chloroform	67-66-3	N	Y
VOC	Chloromethane	74-87-3	N	Y
VOC	Cumene	98-82-8	N	Y
VOC	Cyclohexane	110-82-7	-	Y
VOC	p-Cymene	99-87-6	Y	Y
VOC	Dibromochloromethane	124-48-1	N	Y
VOC	1,4-Dichlorobenzene	106-46-7	N	Y
VOC	Dichlorodifluoromethane	75-71-8	N	Y
VOC	1,2-Dichloroethane	107-06-2	N	Y
VOC	Ethanol	64-17-5	-	Y

Table H-1
Chemicals of Potential Concern
Alexander Hamilton High School, Los Angeles, CA

Chem Group	Chemical	CASRN	Soil	Soil Gas
VOC	Acetic acid, ethyl ester	141-78-6	-	Y
VOC	Ethyl Benzene	100-41-4	Y	Y
VOC	4-Ethyltoluene	622-96-8	-	Y
VOC	n-Heptane	142-82-5	-	Y
VOC	n-Hexane	110-54-3	-	Y
VOC	2-Hexanone	591-78-6	-	Y
VOC	Isopropanol	67-63-0	-	Y
VOC	4-Methyl-2-pentanone	108-10-1	N	Y
VOC	Methylene Chloride	75-09-2	Y	Y
VOC	n-Propylbenzene	103-65-1	Y	Y
VOC	Propylene	115-07-1	-	Y
VOC	Styrene	100-42-5	N	Y
VOC	tert Butyl alcohol	75-65-0	Y	N
VOC	Tetrachloroethene	127-18-4	N	Y
VOC	Tetrahydrofuran	109-99-9	-	Y
VOC	Toluene	108-88-3	Y	Y
VOC	1,2,3-Trichlorobenzene	87-61-6	N	Y
VOC	1,2,4-Trichlorobenzene	120-82-1	N	Y
VOC	1,1,2-Trichloroethane	79-00-5	N	Y
VOC	Trichlorofluoromethane	75-69-4	N	Y
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	N	Y
VOC	1,2,4-Trimethylbenzene	95-63-6	Y	Y
VOC	1,3,5-Trimethylbenzene	108-67-8	N	Y
VOC	Xylenes (total)	1330-20-7	Y	Y

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
AB01	INORG	Arsenic	7440-38-2	A	1.46E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.2E-01		
AB02	INORG	Arsenic	7440-38-2	A	1.73E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.2E-01		
AB03	INORG	Arsenic	7440-38-2	A	1.31E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.7E-01		
AB04	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
AB05	INORG	Arsenic	7440-38-2	A	1.71E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
AB06	INORG	Arsenic	7440-38-2	A	1.75E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.3E-01		
AB07	INORG	Arsenic	7440-38-2	A	1.61E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.8E-01		
AB08	INORG	Arsenic	7440-38-2	A	1.86E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.6E-01		
AB09	INORG	Arsenic	7440-38-2	A	1.64E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.9E-01		
B02	INORG	Arsenic	7440-38-2	A	2.10E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.5E-01		
B02	INORG	Barium	7440-39-3	NC	1.20E+02		1.5E+04				1.5E+04	8.0E-03		8.0E-03
B02	INORG	Chromium (total)	7440-47-3		3.80E+01		1.2E+05				1.2E+05	3.2E-04		3.2E-04
B02	INORG	Cobalt	7440-48-4	LC	1.90E+01	4.2E+02	2.3E+01				2.3E+01	8.3E-01	4.5E-08	**8.3E-01**
B02	INORG	Copper	7440-50-8	D	2.90E+01		3.1E+03				3.1E+03	9.4E-03		9.4E-03
B02	INORG	Lead	7439-92-1	B2	1.30E+01		4.0E+02		8.0E+01		8.0E+01	1.6E-01		
B02	INORG	Nickel	7440-02-0	A	3.00E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	3.7E-02	2.0E-09	3.7E-02
B02	INORG	Vanadium	7440-62-2	ID	6.40E+01		3.9E+02				3.9E+02	1.6E-01		**1.6E-01**
B02	INORG	Zinc	7440-66-6	ID	6.80E+01		2.3E+04				2.3E+04	3.0E-03		3.0E-03
B03	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B03	INORG	Lead	7439-92-1	B2	7.50E+00		4.0E+02		8.0E+01		8.0E+01	9.4E-02		
B03A	INORG	Lead	7439-92-1	B2	7.38E+00		4.0E+02		8.0E+01		8.0E+01	9.2E-02		
B03B	INORG	Lead	7439-92-1	B2	2.37E+01		4.0E+02		8.0E+01		8.0E+01	3.0E-01		
B03CC	INORG	Lead	7439-92-1	B2	8.82E+00		4.0E+02		8.0E+01		8.0E+01	1.1E-01		
B04	INORG	Antimony	7440-36-0	ID	1.29E+01		3.1E+01				3.1E+01	4.2E-01		**4.2E-01**
B04	INORG	Arsenic	7440-38-2	A	2.15E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.7E-01		
B04	INORG	Barium	7440-39-3	NC	1.80E+02		1.5E+04				1.5E+04	1.2E-02		1.2E-02
B04	INORG	Chromium (total)	7440-47-3		4.20E+01		1.2E+05				1.2E+05	3.5E-04		3.5E-04
B04	INORG	Cobalt	7440-48-4	LC	1.75E+01	4.2E+02	2.3E+01				2.3E+01	7.6E-01	4.2E-08	**7.6E-01**
B04	INORG	Copper	7440-50-8	D	3.80E+01		3.1E+03				3.1E+03	1.2E-02		1.2E-02
B04	INORG	Lead	7439-92-1	B2	1.05E+01		4.0E+02		8.0E+01		8.0E+01	1.3E-01		
B04	INORG	Nickel	7440-02-0	A	4.15E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	5.1E-02	2.8E-09	5.1E-02
B04	INORG	Vanadium	7440-62-2	ID	8.35E+01		3.9E+02				3.9E+02	2.1E-01		**2.1E-01**
B04	INORG	Zinc	7440-66-6	ID	8.40E+01		2.3E+04				2.3E+04	3.7E-03		3.7E-03
B05	INORG	Arsenic	7440-38-2	A	2.60E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	9.3E-01		
B05	INORG	Barium	7440-39-3	NC	1.50E+02		1.5E+04				1.5E+04	1.0E-02		1.0E-02
B05	INORG	Chromium (total)	7440-47-3		4.60E+01		1.2E+05				1.2E+05	3.8E-04		3.8E-04
B05	INORG	Cobalt	7440-48-4	LC	1.40E+01	4.2E+02	2.3E+01				2.3E+01	6.1E-01	3.3E-08	**6.1E-01**
B05	INORG	Copper	7440-50-8	D	4.00E+01		3.1E+03				3.1E+03	1.3E-02		1.3E-02
B05	INORG	Lead	7439-92-1	B2	1.80E+01		4.0E+02		8.0E+01		8.0E+01	2.3E-01		
B05	INORG	Nickel	7440-02-0	A	3.30E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.0E-02	2.2E-09	4.0E-02
B05	INORG	Vanadium	7440-62-2	ID	9.00E+01		3.9E+02				3.9E+02	2.3E-01		**2.3E-01**
B05	INORG	Zinc	7440-66-6	ID	8.60E+01		2.3E+04				2.3E+04	3.7E-03		3.7E-03
B06	INORG	Arsenic	7440-38-2	A	2.10E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.5E-01		
B06	INORG	Lead	7439-92-1	B2	2.10E+01		4.0E+02		8.0E+01		8.0E+01	2.6E-01		
B07	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B07	INORG	Lead	7439-92-1	B2	1.50E+01		4.0E+02		8.0E+01		8.0E+01	1.9E-01		
B08	INORG	Arsenic	7440-38-2	A	2.20E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.9E-01		
B08	INORG	Lead	7439-92-1	B2	1.10E+01		4.0E+02		8.0E+01		8.0E+01	1.4E-01		

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B09	INORG	Arsenic	7440-38-2	A	2.10E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.5E-01		
B09	INORG	Lead	7439-92-1	B2	1.40E+01		4.0E+02		8.0E+01		8.0E+01	1.8E-01		
B10	INORG	Arsenic	7440-38-2	A	2.20E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.9E-01		
B10	INORG	Lead	7439-92-1	B2	1.10E+01		4.0E+02		8.0E+01		8.0E+01	1.4E-01		
B100	INORG	Antimony	7440-36-0	ID	2.09E+00		3.1E+01				3.1E+01	6.7E-02		6.7E-02
B100	INORG	Arsenic	7440-38-2	A	1.41E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.0E-01		
B100	INORG	Barium	7440-39-3	NC	2.02E+02		1.5E+04				1.5E+04	1.3E-02		1.3E-02
B100	INORG	Cadmium	7440-43-9	B1	2.83E+00	2.1E+03	7.1E+01	9.1E+02	7.1E+01		7.1E+01	4.0E-02	3.1E-09	4.0E-02
B100	INORG	Chromium (total)	7440-47-3		4.19E+01		1.2E+05				1.2E+05	3.5E-04		3.5E-04
B100	INORG	Cobalt	7440-48-4	LC	1.34E+01	4.2E+02	2.3E+01				2.3E+01	5.8E-01	3.2E-08	**5.8E-01**
B100	INORG	Copper	7440-50-8	D	2.91E+01		3.1E+03				3.1E+03	9.4E-03		9.4E-03
B100	INORG	Lead	7439-92-1	B2	4.76E+00		4.0E+02		8.0E+01		8.0E+01	6.0E-02		
B100	INORG	Molybdenum	7439-98-7		2.24E+00		3.9E+02				3.9E+02	5.7E-03		5.7E-03
B100	INORG	Nickel	7440-02-0	A	3.32E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.0E-02	2.2E-09	4.0E-02
B100	INORG	Thallium	7440-28-0	ID	2.22E+00									
B100	INORG	Vanadium	7440-62-2	ID	8.34E+01		3.9E+02				3.9E+02	2.1E-01		**2.1E-01**
B100	INORG	Zinc	7440-66-6	ID	6.71E+01		2.3E+04				2.3E+04	2.9E-03		2.9E-03
B101	INORG	Antimony	7440-36-0	ID	3.53E+00		3.1E+01				3.1E+01	1.1E-01		**1.1E-01**
B101	INORG	Arsenic	7440-38-2	A	1.35E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.8E-01		
B101	INORG	Barium	7440-39-3	NC	1.27E+02		1.5E+04				1.5E+04	8.5E-03		8.5E-03
B101	INORG	Cadmium	7440-43-9	B1	2.62E+00	2.1E+03	7.1E+01	9.1E+02	7.1E+01		7.1E+01	3.7E-02	2.9E-09	3.7E-02
B101	INORG	Chromium (total)	7440-47-3		4.09E+01		1.2E+05				1.2E+05	3.4E-04		3.4E-04
B101	INORG	Cobalt	7440-48-4	LC	1.17E+01	4.2E+02	2.3E+01				2.3E+01	5.1E-01	2.8E-08	**5.1E-01**
B101	INORG	Copper	7440-50-8	D	2.64E+01		3.1E+03				3.1E+03	8.5E-03		8.5E-03
B101	INORG	Lead	7439-92-1	B2	7.16E+00		4.0E+02		8.0E+01		8.0E+01	8.9E-02		
B101	INORG	Molybdenum	7439-98-7		2.58E+00		3.9E+02				3.9E+02	6.6E-03		6.6E-03
B101	INORG	Nickel	7440-02-0	A	3.14E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	3.8E-02	2.1E-09	3.8E-02
B101	INORG	Thallium	7440-28-0	ID	2.59E+00									
B101	INORG	Vanadium	7440-62-2	ID	7.66E+01		3.9E+02				3.9E+02	2.0E-01		**2.0E-01**
B101	INORG	Zinc	7440-66-6	ID	7.60E+01		2.3E+04				2.3E+04	3.3E-03		3.3E-03
B102	PEST	Chlordane (total)	57-74-9	B2	1.40E-01	1.7E+00	3.5E+01	1.7E+00	3.5E+01		1.7E+00	8.2E-02	8.2E-08	4.0E-03
B102	PEST	4,4'-DDD	72-54-8	B2	1.10E-02	2.3E+00	1.9E+00	2.3E+00	1.9E+00		1.9E+00	5.8E-03	4.8E-09	5.8E-03
B102	PEST	4,4'-DDE	72-55-9	B2	1.70E-02	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	8.5E-03	8.5E-09	7.4E-04
B102	PEST	4,4'-DDT	50-29-3	B2	2.50E-01	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	1.3E-01	1.3E-07	6.8E-03
B102	PEST	Dieldrin	60-57-1	B2	2.80E-02	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	8.2E-01	**8.2E-07**	8.8E-03
B102	PEST	Heptachlor epoxide	1024-57-3	B2	3.90E-03	7.0E-02	1.0E+00	7.0E-02	9.9E-01		7.0E-02	5.6E-02	5.6E-08	3.9E-03
B102	INORG	Antimony	7440-36-0	ID	3.22E+00		3.1E+01				3.1E+01	1.0E-01		**1.0E-01**
B102	INORG	Arsenic	7440-38-2	A	1.38E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.9E-01		
B102	INORG	Barium	7440-39-3	NC	1.73E+02		1.5E+04				1.5E+04	1.2E-02		1.2E-02
B102	INORG	Cadmium	7440-43-9	B1	2.95E+00	2.1E+03	7.1E+01	9.1E+02	7.1E+01		7.1E+01	4.2E-02	3.2E-09	4.2E-02
B102	INORG	Chromium (total)	7440-47-3		3.79E+01		1.2E+05				1.2E+05	3.2E-04		3.2E-04
B102	INORG	Cobalt	7440-48-4	LC	1.23E+01	4.2E+02	2.3E+01				2.3E+01	5.3E-01	2.9E-08	**5.3E-01**
B102	INORG	Copper	7440-50-8	D	2.78E+01		3.1E+03				3.1E+03	9.0E-03		9.0E-03
B102	INORG	Lead	7439-92-1	B2	4.73E+01		4.0E+02		8.0E+01		8.0E+01	5.9E-01		
B102	INORG	Molybdenum	7439-98-7		2.59E+00		3.9E+02				3.9E+02	6.6E-03		6.6E-03
B102	INORG	Nickel	7440-02-0	A	3.11E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	3.8E-02	2.1E-09	3.8E-02
B102	INORG	Thallium	7440-28-0	ID	2.02E+00									
B102	INORG	Vanadium	7440-62-2	ID	6.71E+01		3.9E+02				3.9E+02	1.7E-01		**1.7E-01**

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B102	INORG	Zinc	7440-66-6	ID	1.06E+02		2.3E+04				2.3E+04	4.6E-03		4.6E-03
B103	PEST	4,4'-DDE	72-55-9	B2	3.20E-03	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	1.6E-03	1.6E-09	1.4E-04
B103	PEST	4,4'-DDT	50-29-3	B2	3.05E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	1.6E-03	1.6E-09	8.2E-05
B103	PEST	Dieldrin	60-57-1	B2	2.80E-03	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	8.2E-02	8.2E-08	8.8E-04
B103	INORG	Arsenic	7440-38-2	A	1.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	3.6E-01		
B103	INORG	Lead	7439-92-1	B2	2.45E+01		4.0E+02		8.0E+01		8.0E+01	3.1E-01		
B104	INORG	Arsenic	7440-38-2	A	1.10E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	3.9E-01		
B104	INORG	Lead	7439-92-1	B2	3.82E+01		4.0E+02		8.0E+01		8.0E+01	4.8E-01		
B105	INORG	Arsenic	7440-38-2	A	1.27E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.5E-01		
B105	INORG	Lead	7439-92-1	B2	1.85E+01		4.0E+02		8.0E+01		8.0E+01	2.3E-01		
B106	PEST	4,4'-DDE	72-55-9	B2	5.30E-03	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	2.7E-03	2.7E-09	2.3E-04
B106	PEST	4,4'-DDT	50-29-3	B2	4.50E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	2.4E-03	2.4E-09	1.2E-04
B106	PEST	Dieldrin	60-57-1	B2	2.70E-03	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	7.9E-02	7.9E-08	8.4E-04
B106	INORG	Arsenic	7440-38-2	A	1.16E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.1E-01		
B106	INORG	Lead	7439-92-1	B2	2.02E+01		4.0E+02		8.0E+01		8.0E+01	2.5E-01		
B107	INORG	Arsenic	7440-38-2	A	1.26E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.5E-01		
B107	INORG	Lead	7439-92-1	B2	3.72E+01		4.0E+02		8.0E+01		8.0E+01	4.7E-01		
B108	PEST	Chlordane (total)	57-74-9	B2	1.90E-01	1.7E+00	3.5E+01	1.7E+00	3.5E+01		1.7E+00	1.1E-01	1.1E-07	5.4E-03
B108	PEST	4,4'-DDE	72-55-9	B2	2.50E-03	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	1.3E-03	1.3E-09	1.1E-04
B108	PEST	4,4'-DDT	50-29-3	B2	4.30E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	2.3E-03	2.3E-09	1.2E-04
B108	PEST	Dieldrin	60-57-1	B2	1.60E-02	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	4.7E-01	**4.7E-07**	5.0E-03
B108	PEST	Heptachlor epoxide	1024-57-3	B2	2.40E-03	7.0E-02	1.0E+00	7.0E-02	9.9E-01		7.0E-02	3.4E-02	3.4E-08	2.4E-03
B108	INORG	Arsenic	7440-38-2	A	1.42E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.1E-01		
B108	INORG	Lead	7439-92-1	B2	2.69E+01		4.0E+02		8.0E+01		8.0E+01	3.4E-01		
B109	PEST	4,4'-DDT	50-29-3	B2	8.30E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	4.4E-03	4.4E-09	2.2E-04
B109	PEST	Dieldrin	60-57-1	B2	5.30E-03	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	1.6E-01	**1.6E-07**	1.7E-03
B109	INORG	Arsenic	7440-38-2	A	1.16E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.1E-01		
B109	INORG	Lead	7439-92-1	B2	2.58E+01		4.0E+02		8.0E+01		8.0E+01	3.2E-01		
B10A	INORG	Lead	7439-92-1	B2	1.68E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B10B	INORG	Lead	7439-92-1	B2	7.56E+00		4.0E+02		8.0E+01		8.0E+01	9.5E-02		
B10C	INORG	Lead	7439-92-1	B2	2.17E+01		4.0E+02		8.0E+01		8.0E+01	2.7E-01		
B117	VOC	Benzene	71-43-2	A	1.10E-03	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	3.3E-03	3.3E-09	1.0E-04
B117	VOC	2-Butanone	78-93-3	ID	2.20E-03		2.7E+04				2.7E+04	8.1E-08		8.1E-08
B117	VOC	Methylene Chloride	75-09-2	LC	2.30E-03	5.7E+01	3.5E+02	2.2E+00	3.1E+02		2.2E+00	1.0E-03	1.0E-09	7.4E-06
B117	VOC	Toluene	108-88-3	ID	4.00E-04		4.9E+03		1.1E+03		1.1E+03	3.6E-07		3.6E-07
B117	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	3.20E-04		3.0E+02				3.0E+02	1.1E-06		1.1E-06
B118	VOC	Benzene	71-43-2	A	5.30E-04	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	1.6E-03	1.6E-09	4.8E-05
B118	VOC	2-Butanone	78-93-3	ID	1.70E-03		2.7E+04				2.7E+04	6.3E-08		6.3E-08
B118	VOC	Toluene	108-88-3	ID	1.90E-04		4.9E+03		1.1E+03		1.1E+03	1.7E-07		1.7E-07
B119	VOC	Acetone	67-64-1	ID	8.70E-02		6.1E+04				6.1E+04	1.4E-06		1.4E-06
B119	VOC	Benzene	71-43-2	A	9.70E-04	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	2.9E-03	2.9E-09	8.8E-05
B119	VOC	2-Butanone	78-93-3	ID	4.50E-03		2.7E+04				2.7E+04	1.7E-07		1.7E-07
B119	VOC	Toluene	108-88-3	ID	3.80E-04		4.9E+03		1.1E+03		1.1E+03	3.5E-07		3.5E-07
B11A	INORG	Arsenic	7440-38-2	A	1.59E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.7E-01		
B11BB	INORG	Arsenic	7440-38-2	A	1.65E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.9E-01		
B11D	INORG	Arsenic	7440-38-2	A	1.65E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.9E-01		
B11DDD	VOC	Benzene	71-43-2	A	1.18E-03	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	3.6E-03	3.6E-09	1.1E-04
B11DDD	VOC	2-Butanone	78-93-3	ID	1.60E-03		2.7E+04				2.7E+04	5.9E-08		5.9E-08

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B11DDD	VOC	Methylene Chloride	75-09-2	LC	2.05E-03	5.7E+01	3.5E+02	2.2E+00	3.1E+02		2.2E+00	9.3E-04	9.3E-10	6.6E-06
B11DDD	VOC	Toluene	108-88-3	ID	1.19E-03		4.9E+03		1.1E+03		1.1E+03	1.1E-06		1.1E-06
B12	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B12	INORG	Lead	7439-92-1	B2	8.10E+00		4.0E+02		8.0E+01		8.0E+01	1.0E-01		
B120	VOC	Acetone	67-64-1	ID	5.45E-02		6.1E+04				6.1E+04	8.9E-07		8.9E-07
B120	VOC	Benzene	71-43-2	A	6.20E-04	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	1.9E-03	1.9E-09	5.6E-05
B120	VOC	2-Butanone	78-93-3	ID	4.85E-03		2.7E+04				2.7E+04	1.8E-07		1.8E-07
B120	VOC	Toluene	108-88-3	ID	2.90E-04		4.9E+03		1.1E+03		1.1E+03	2.6E-07		2.6E-07
B121	VOC	Benzene	71-43-2	A	6.40E-04	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	1.9E-03	1.9E-09	5.8E-05
B121	VOC	2-Butanone	78-93-3	ID	4.20E-03		2.7E+04				2.7E+04	1.6E-07		1.6E-07
B121	VOC	Methylene Chloride	75-09-2	LC	4.20E-03	5.7E+01	3.5E+02	2.2E+00	3.1E+02		2.2E+00	1.9E-03	1.9E-09	1.4E-05
B121	VOC	Toluene	108-88-3	ID	2.10E-04		4.9E+03		1.1E+03		1.1E+03	1.9E-07		1.9E-07
B12AA	INORG	Lead	7439-92-1	B2	9.71E+00		4.0E+02		8.0E+01		8.0E+01	1.2E-01		
B12CC	INORG	Lead	7439-92-1	B2	6.09E+00		4.0E+02		8.0E+01		8.0E+01	7.6E-02		
B13	INORG	Arsenic	7440-38-2	A	2.10E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.5E-01		
B13	INORG	Lead	7439-92-1	B2	2.20E+01		4.0E+02		8.0E+01		8.0E+01	2.7E-01		
B14	INORG	Arsenic	7440-38-2	A	1.60E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.7E-01		
B14	INORG	Lead	7439-92-1	B2	9.60E+00		4.0E+02		8.0E+01		8.0E+01	1.2E-01		
B15	INORG	Arsenic	7440-38-2	A	2.20E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.9E-01		
B15	INORG	Lead	7439-92-1	B2	5.60E+01		4.0E+02		8.0E+01		8.0E+01	7.0E-01		
B16	INORG	Arsenic	7440-38-2	A	2.20E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.9E-01		
B16	INORG	Lead	7439-92-1	B2	8.90E+00		4.0E+02		8.0E+01		8.0E+01	1.1E-01		
B17	INORG	Arsenic	7440-38-2	A	2.30E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.2E-01		
B17	INORG	Lead	7439-92-1	B2	2.90E+01		4.0E+02		8.0E+01		8.0E+01	3.6E-01		
B18A	INORG	Arsenic	7440-38-2	A	1.34E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.8E-01		
B18B	INORG	Arsenic	7440-38-2	A	1.31E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.7E-01		
B18C	INORG	Arsenic	7440-38-2	A	1.31E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.7E-01		
B18D	INORG	Arsenic	7440-38-2	A	1.47E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.3E-01		
B19	PEST	Chlordane (total)	57-74-9	B2	1.53E-02	1.7E+00	3.5E+01	1.7E+00	3.5E+01		1.7E+00	9.0E-03	9.0E-09	4.4E-04
B19	INORG	Arsenic	7440-38-2	A	1.85E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.6E-01		
B19	INORG	Lead	7439-92-1	B2	1.70E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B20	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B20	INORG	Lead	7439-92-1	B2	7.70E+00		4.0E+02		8.0E+01		8.0E+01	9.6E-02		
B20A	INORG	Arsenic	7440-38-2	A	1.12E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.0E-01		
B20C	INORG	Arsenic	7440-38-2	A	2.28E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.1E-01		
B20D	INORG	Arsenic	7440-38-2	A	5.44E+00	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	1.9E-01		
B21	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B21	INORG	Lead	7439-92-1	B2	3.20E+01		4.0E+02		8.0E+01		8.0E+01	4.0E-01		
B25	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B25	INORG	Lead	7439-92-1	B2	6.80E+00		4.0E+02		8.0E+01		8.0E+01	8.5E-02		
B25A	INORG	Lead	7439-92-1	B2	2.13E+01		4.0E+02		8.0E+01		8.0E+01	2.7E-01		
B25BB	INORG	Lead	7439-92-1	B2	5.44E+01		4.0E+02		8.0E+01		8.0E+01	6.8E-01		
B25DD	INORG	Lead	7439-92-1	B2	3.76E+01		4.0E+02		8.0E+01		8.0E+01	4.7E-01		
B26	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B26	INORG	Lead	7439-92-1	B2	9.00E+00		4.0E+02		8.0E+01		8.0E+01	1.1E-01		
B27	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B27	INORG	Lead	7439-92-1	B2	5.50E+01		4.0E+02		8.0E+01		8.0E+01	6.9E-01		
B28	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B28	INORG	Lead	7439-92-1	B2	9.90E+00		4.0E+02		8.0E+01		8.0E+01	1.2E-01		
B29	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B29	INORG	Lead	7439-92-1	B2	1.20E+01		4.0E+02		8.0E+01		8.0E+01	1.5E-01		
B30	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B30	INORG	Lead	7439-92-1	B2	1.30E+01		4.0E+02		8.0E+01		8.0E+01	1.6E-01		
B31	INORG	Arsenic	7440-38-2	A	1.55E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.5E-01		
B31	INORG	Lead	7439-92-1	B2	3.60E+01		4.0E+02		8.0E+01		8.0E+01	4.5E-01		
B32	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B32	INORG	Lead	7439-92-1	B2	1.70E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B41	PEST	4,4'-DDD	72-54-8	B2	8.00E-03	2.3E+00	1.9E+00	2.3E+00	1.9E+00		1.9E+00	4.2E-03	3.5E-09	4.2E-03
B41	PEST	4,4'-DDE	72-55-9	B2	1.40E-02	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	7.0E-03	7.0E-09	6.1E-04
B41	PEST	4,4'-DDT	50-29-3	B2	2.40E-02	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	1.3E-02	1.3E-08	6.5E-04
B41	INORG	Arsenic	7440-38-2	A	1.80E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.4E-01		
B41	INORG	Lead	7439-92-1	B2	8.80E+00		4.0E+02		8.0E+01		8.0E+01	1.1E-01		
B42	INORG	Arsenic	7440-38-2	A	1.30E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.6E-01		
B42	INORG	Lead	7439-92-1	B2	1.40E+01		4.0E+02		8.0E+01		8.0E+01	1.8E-01		
B43	INORG	Arsenic	7440-38-2	A	1.80E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.4E-01		
B43	INORG	Lead	7439-92-1	B2	2.10E+01		4.0E+02		8.0E+01		8.0E+01	2.6E-01		
B44	INORG	Arsenic	7440-38-2	A	2.10E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.5E-01		
B44	INORG	Lead	7439-92-1	B2	2.20E+01		4.0E+02		8.0E+01		8.0E+01	2.8E-01		
B45	INORG	Barium	7440-39-3	NC	1.30E+02		1.5E+04				1.5E+04	8.7E-03		8.7E-03
B45	INORG	Chromium (total)	7440-47-3		2.50E+01		1.2E+05				1.2E+05	2.1E-04		2.1E-04
B45	INORG	Cobalt	7440-48-4	LC	9.70E+00	4.2E+02	2.3E+01				2.3E+01	4.2E-01	2.3E-08	**4.2E-01**
B45	INORG	Copper	7440-50-8	D	2.60E+01		3.1E+03				3.1E+03	8.4E-03		8.4E-03
B45	INORG	Lead	7439-92-1	B2	1.70E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B45	INORG	Nickel	7440-02-0	A	1.90E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	2.3E-02	1.3E-09	2.3E-02
B45	INORG	Vanadium	7440-62-2	ID	6.50E+01		3.9E+02				3.9E+02	1.7E-01		**1.7E-01**
B45	INORG	Zinc	7440-66-6	ID	5.90E+01		2.3E+04				2.3E+04	2.6E-03		2.6E-03
B46	PDIST	Motor Oil	M-OIL		3.36E+01									
B46	INORG	Arsenic	7440-38-2	A	5.00E+00	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	1.8E-01		
B46	INORG	Barium	7440-39-3	NC	1.70E+02		1.5E+04				1.5E+04	1.1E-02		1.1E-02
B46	INORG	Chromium (total)	7440-47-3		3.50E+01		1.2E+05				1.2E+05	2.9E-04		2.9E-04
B46	INORG	Cobalt	7440-48-4	LC	1.50E+01	4.2E+02	2.3E+01				2.3E+01	6.5E-01	3.6E-08	**6.5E-01**
B46	INORG	Copper	7440-50-8	D	4.80E+01		3.1E+03				3.1E+03	1.5E-02		1.5E-02
B46	INORG	Lead	7439-92-1	B2	1.50E+01		4.0E+02		8.0E+01		8.0E+01	1.9E-01		
B46	INORG	Nickel	7440-02-0	A	2.40E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	2.9E-02	1.6E-09	2.9E-02
B46	INORG	Vanadium	7440-62-2	ID	9.15E+01		3.9E+02				3.9E+02	2.3E-01		**2.3E-01**
B46	INORG	Zinc	7440-66-6	ID	1.95E+02		2.3E+04				2.3E+04	8.5E-03		8.5E-03
B47	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B47	INORG	Lead	7439-92-1	B2	1.70E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B48	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B48	INORG	Lead	7439-92-1	B2	2.00E+01		4.0E+02		8.0E+01		8.0E+01	2.5E-01		
B49	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B49	INORG	Lead	7439-92-1	B2	8.40E+00		4.0E+02		8.0E+01		8.0E+01	1.1E-01		
B50	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B50	INORG	Lead	7439-92-1	B2	5.20E+01		4.0E+02		8.0E+01		8.0E+01	6.5E-01		
B51	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B51	INORG	Lead	7439-92-1	B2	1.24E+01		4.0E+02		8.0E+01		8.0E+01	1.5E-01		

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B52	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B52	INORG	Lead	7439-92-1	B2	1.70E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B53	INORG	Arsenic	7440-38-2	A	2.30E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.2E-01		
B53	INORG	Barium	7440-39-3	NC	1.70E+02		1.5E+04				1.5E+04	1.1E-02		1.1E-02
B53	INORG	Chromium (total)	7440-47-3		4.50E+01		1.2E+05				1.2E+05	3.8E-04		3.8E-04
B53	INORG	Cobalt	7440-48-4	LC	2.30E+01	4.2E+02	2.3E+01				2.3E+01	1.0E+00	5.5E-08	**1.0E+00**
B53	INORG	Copper	7440-50-8	D	3.50E+01		3.1E+03				3.1E+03	1.1E-02		1.1E-02
B53	INORG	Lead	7439-92-1	B2	1.20E+01		4.0E+02		8.0E+01		8.0E+01	1.5E-01		
B53	INORG	Nickel	7440-02-0	A	3.40E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.1E-02	2.3E-09	4.1E-02
B53	INORG	Vanadium	7440-62-2	ID	8.20E+01		3.9E+02				3.9E+02	2.1E-01		**2.1E-01**
B53	INORG	Zinc	7440-66-6	ID	8.90E+01		2.3E+04				2.3E+04	3.9E-03		3.9E-03
B53A	INORG	Arsenic	7440-38-2	A	1.73E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.2E-01		
B53A	INORG	Cobalt	7440-48-4	LC	1.60E+01	4.2E+02	2.3E+01				2.3E+01	7.0E-01	3.8E-08	**7.0E-01**
B53B	INORG	Arsenic	7440-38-2	A	1.54E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.5E-01		
B53B	INORG	Cobalt	7440-48-4	LC	2.06E+01	4.2E+02	2.3E+01				2.3E+01	9.0E-01	4.9E-08	**9.0E-01**
B53C	INORG	Arsenic	7440-38-2	A	1.79E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.4E-01		
B53C	INORG	Cobalt	7440-48-4	LC	1.76E+01	4.2E+02	2.3E+01				2.3E+01	7.7E-01	4.2E-08	**7.7E-01**
B53D	INORG	Arsenic	7440-38-2	A	1.54E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.5E-01		
B53D	INORG	Cobalt	7440-48-4	LC	1.73E+01	4.2E+02	2.3E+01				2.3E+01	7.5E-01	4.1E-08	**7.5E-01**
B55	PDIST	Motor Oil	M-OIL		1.36E+01									
B55	INORG	Arsenic	7440-38-2	A	2.20E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.9E-01		
B55	INORG	Barium	7440-39-3	NC	1.50E+02		1.5E+04				1.5E+04	1.0E-02		1.0E-02
B55	INORG	Chromium (total)	7440-47-3		4.50E+01		1.2E+05				1.2E+05	3.8E-04		3.8E-04
B55	INORG	Cobalt	7440-48-4	LC	1.70E+01	4.2E+02	2.3E+01				2.3E+01	7.4E-01	4.0E-08	**7.4E-01**
B55	INORG	Copper	7440-50-8	D	3.40E+01		3.1E+03				3.1E+03	1.1E-02		1.1E-02
B55	INORG	Lead	7439-92-1	B2	1.85E+01		4.0E+02		8.0E+01		8.0E+01	2.3E-01		
B55	INORG	Nickel	7440-02-0	A	3.40E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.1E-02	2.3E-09	4.1E-02
B55	INORG	Vanadium	7440-62-2	ID	7.90E+01		3.9E+02				3.9E+02	2.0E-01		**2.0E-01**
B55	INORG	Zinc	7440-66-6	ID	1.11E+02		2.3E+04				2.3E+04	4.8E-03		4.8E-03
B56	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B56	INORG	Barium	7440-39-3	NC	1.30E+02		1.5E+04				1.5E+04	8.7E-03		8.7E-03
B56	INORG	Chromium (total)	7440-47-3		3.90E+01		1.2E+05				1.2E+05	3.3E-04		3.3E-04
B56	INORG	Cobalt	7440-48-4	LC	1.60E+01	4.2E+02	2.3E+01				2.3E+01	7.0E-01	3.8E-08	**7.0E-01**
B56	INORG	Copper	7440-50-8	D	3.50E+01		3.1E+03				3.1E+03	1.1E-02		1.1E-02
B56	INORG	Lead	7439-92-1	B2	8.30E+00		4.0E+02		8.0E+01		8.0E+01	1.0E-01		
B56	INORG	Nickel	7440-02-0	A	3.60E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.4E-02	2.4E-09	4.4E-02
B56	INORG	Vanadium	7440-62-2	ID	8.10E+01		3.9E+02				3.9E+02	2.1E-01		**2.1E-01**
B56	INORG	Zinc	7440-66-6	ID	7.80E+01		2.3E+04				2.3E+04	3.4E-03		3.4E-03
B57A	INORG	Arsenic	7440-38-2	A	1.91E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B57A	INORG	Cobalt	7440-48-4	LC	1.89E+01	4.2E+02	2.3E+01				2.3E+01	8.2E-01	4.5E-08	**8.2E-01**
B57B	INORG	Arsenic	7440-38-2	A	1.84E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.6E-01		
B57B	INORG	Cobalt	7440-48-4	LC	1.83E+01	4.2E+02	2.3E+01				2.3E+01	8.0E-01	4.4E-08	**8.0E-01**
B57C	INORG	Arsenic	7440-38-2	A	1.67E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.0E-01		
B57C	INORG	Cobalt	7440-48-4	LC	1.56E+01	4.2E+02	2.3E+01				2.3E+01	6.8E-01	3.7E-08	**6.8E-01**
B57D	INORG	Cobalt	7440-48-4	LC	1.41E+01	4.2E+02	2.3E+01				2.3E+01	6.1E-01	3.3E-08	**6.1E-01**
B60	INORG	Arsenic	7440-38-2	A	2.50E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.9E-01		
B60	INORG	Barium	7440-39-3	NC	1.20E+02		1.5E+04				1.5E+04	8.0E-03		8.0E-03
B60	INORG	Chromium (total)	7440-47-3		4.20E+01		1.2E+05				1.2E+05	3.5E-04		3.5E-04

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B60	INORG	Cobalt	7440-48-4	LC	1.30E+01	4.2E+02	2.3E+01				2.3E+01	5.7E-01	3.1E-08	**5.7E-01**
B60	INORG	Copper	7440-50-8	D	2.90E+01		3.1E+03				3.1E+03	9.4E-03		9.4E-03
B60	INORG	Lead	7439-92-1	B2	1.40E+01		4.0E+02		8.0E+01		8.0E+01	1.8E-01		
B60	INORG	Nickel	7440-02-0	A	3.00E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	3.7E-02	2.0E-09	3.7E-02
B60	INORG	Vanadium	7440-62-2	ID	6.90E+01		3.9E+02				3.9E+02	1.8E-01		**1.8E-01**
B60	INORG	Zinc	7440-66-6	ID	6.70E+01		2.3E+04				2.3E+04	2.9E-03		2.9E-03
B61	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B61	INORG	Barium	7440-39-3	NC	1.10E+02		1.5E+04				1.5E+04	7.3E-03		7.3E-03
B61	INORG	Chromium (total)	7440-47-3		3.60E+01		1.2E+05				1.2E+05	3.0E-04		3.0E-04
B61	INORG	Cobalt	7440-48-4	LC	2.00E+01	4.2E+02	2.3E+01				2.3E+01	8.7E-01	4.8E-08	**8.7E-01**
B61	INORG	Copper	7440-50-8	D	2.90E+01		3.1E+03				3.1E+03	9.4E-03		9.4E-03
B61	INORG	Lead	7439-92-1	B2	1.10E+01		4.0E+02		8.0E+01		8.0E+01	1.4E-01		
B61	INORG	Nickel	7440-02-0	A	2.80E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	3.4E-02	1.9E-09	3.4E-02
B61	INORG	Vanadium	7440-62-2	ID	6.60E+01		3.9E+02				3.9E+02	1.7E-01		**1.7E-01**
B61	INORG	Zinc	7440-66-6	ID	6.40E+01		2.3E+04				2.3E+04	2.8E-03		2.8E-03
B61A	INORG	Arsenic	7440-38-2	A	1.68E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.0E-01		
B61A	INORG	Cobalt	7440-48-4	LC	1.69E+01	4.2E+02	2.3E+01				2.3E+01	7.3E-01	4.0E-08	**7.3E-01**
B61B	INORG	Arsenic	7440-38-2	A	1.67E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.9E-01		
B61B	INORG	Cobalt	7440-48-4	LC	1.26E+01	4.2E+02	2.3E+01				2.3E+01	5.5E-01	3.0E-08	**5.5E-01**
B62	VOC	p-Cymene	99-87-6	ID	4.50E-03									
B62	VOC	n-Propylbenzene	103-65-1	ID	5.40E-03		3.8E+03				3.8E+03	1.4E-06		1.4E-06
B62	VOC	Toluene	108-88-3	ID	9.00E-03		4.9E+03		1.1E+03		1.1E+03	8.2E-06		8.2E-06
B62	PDIST	Motor Oil	M-OIL		5.00E+01									
B62	INORG	Arsenic	7440-38-2	A	2.00E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.1E-01		
B62	INORG	Barium	7440-39-3	NC	1.40E+02		1.5E+04				1.5E+04	9.3E-03		9.3E-03
B62	INORG	Chromium (total)	7440-47-3		4.30E+01		1.2E+05				1.2E+05	3.6E-04		3.6E-04
B62	INORG	Cobalt	7440-48-4	LC	1.60E+01	4.2E+02	2.3E+01				2.3E+01	7.0E-01	3.8E-08	**7.0E-01**
B62	INORG	Copper	7440-50-8	D	3.30E+01		3.1E+03				3.1E+03	1.1E-02		1.1E-02
B62	INORG	Lead	7439-92-1	B2	7.00E+00		4.0E+02		8.0E+01		8.0E+01	8.8E-02		
B62	INORG	Nickel	7440-02-0	A	3.50E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.3E-02	2.3E-09	4.3E-02
B62	INORG	Vanadium	7440-62-2	ID	7.70E+01		3.9E+02				3.9E+02	2.0E-01		**2.0E-01**
B62	INORG	Zinc	7440-66-6	ID	7.70E+01		2.3E+04				2.3E+04	3.3E-03		3.3E-03
B63	INORG	Antimony	7440-36-0	ID	1.10E+01		3.1E+01				3.1E+01	3.5E-01		**3.5E-01**
B63	INORG	Arsenic	7440-38-2	A	2.30E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.2E-01		
B63	INORG	Barium	7440-39-3	NC	7.30E+01		1.5E+04				1.5E+04	4.9E-03		4.9E-03
B63	INORG	Chromium (total)	7440-47-3		3.80E+01		1.2E+05				1.2E+05	3.2E-04		3.2E-04
B63	INORG	Cobalt	7440-48-4	LC	1.20E+01	4.2E+02	2.3E+01				2.3E+01	5.2E-01	2.9E-08	**5.2E-01**
B63	INORG	Copper	7440-50-8	D	3.00E+01		3.1E+03				3.1E+03	9.7E-03		9.7E-03
B63	INORG	Lead	7439-92-1	B2	6.50E+00		4.0E+02		8.0E+01		8.0E+01	8.1E-02		
B63	INORG	Nickel	7440-02-0	A	2.40E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	2.9E-02	1.6E-09	2.9E-02
B63	INORG	Vanadium	7440-62-2	ID	5.80E+01		3.9E+02				3.9E+02	1.5E-01		**1.5E-01**
B63	INORG	Zinc	7440-66-6	ID	5.40E+01		2.3E+04				2.3E+04	2.3E-03		2.3E-03
B64	VOC	Toluene	108-88-3	ID	9.10E-03		4.9E+03		1.1E+03		1.1E+03	8.3E-06		8.3E-06
B64	PEST	4,4'-DDT	50-29-3	B2	6.60E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	3.5E-03	3.5E-09	1.8E-04
B64	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B64	INORG	Barium	7440-39-3	NC	8.40E+01		1.5E+04				1.5E+04	5.6E-03		5.6E-03
B64	INORG	Chromium (total)	7440-47-3		3.90E+01		1.2E+05				1.2E+05	3.3E-04		3.3E-04
B64	INORG	Cobalt	7440-48-4	LC	8.60E+00	4.2E+02	2.3E+01				2.3E+01	3.7E-01	2.0E-08	**3.7E-01**

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B64	INORG	Copper	7440-50-8	D	2.50E+01		3.1E+03				3.1E+03	8.1E-03		8.1E-03
B64	INORG	Lead	7439-92-1	B2	2.10E+01		4.0E+02		8.0E+01		8.0E+01	2.6E-01		
B64	INORG	Nickel	7440-02-0	A	2.30E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	2.8E-02	1.5E-09	2.8E-02
B64	INORG	Vanadium	7440-62-2	ID	5.50E+01		3.9E+02				3.9E+02	1.4E-01		**1.4E-01**
B64	INORG	Zinc	7440-66-6	ID	5.00E+01		2.3E+04				2.3E+04	2.2E-03		2.2E-03
B65	INORG	Arsenic	7440-38-2	A	2.50E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.9E-01		
B65	INORG	Barium	7440-39-3	NC	1.30E+02		1.5E+04				1.5E+04	8.7E-03		8.7E-03
B65	INORG	Chromium (total)	7440-47-3		5.50E+01		1.2E+05				1.2E+05	4.6E-04		4.6E-04
B65	INORG	Cobalt	7440-48-4	LC	2.20E+01	4.2E+02	2.3E+01				2.3E+01	9.6E-01	5.2E-08	**9.6E-01**
B65	INORG	Copper	7440-50-8	D	3.60E+01		3.1E+03				3.1E+03	1.2E-02		1.2E-02
B65	INORG	Lead	7439-92-1	B2	1.60E+01		4.0E+02		8.0E+01		8.0E+01	2.0E-01		
B65	INORG	Nickel	7440-02-0	A	3.70E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.5E-02	2.5E-09	4.5E-02
B65	INORG	Vanadium	7440-62-2	ID	8.20E+01		3.9E+02				3.9E+02	2.1E-01		**2.1E-01**
B65	INORG	Zinc	7440-66-6	ID	8.70E+01		2.3E+04				2.3E+04	3.8E-03		3.8E-03
B66	INORG	Arsenic	7440-38-2	A	2.50E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.9E-01		
B66	INORG	Lead	7439-92-1	B2	5.70E+00		4.0E+02		8.0E+01		8.0E+01	7.1E-02		
B67	INORG	Arsenic	7440-38-2	A	1.50E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.4E-01		
B67	INORG	Lead	7439-92-1	B2	2.00E+01		4.0E+02		8.0E+01		8.0E+01	2.5E-01		
B68	INORG	Arsenic	7440-38-2	A	2.30E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.2E-01		
B68	INORG	Lead	7439-92-1	B2	1.80E+01		4.0E+02		8.0E+01		8.0E+01	2.3E-01		
B69	PEST	4,4'-DDE	72-55-9	B2	1.30E-02	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	6.5E-03	6.5E-09	5.7E-04
B69	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B69	INORG	Lead	7439-92-1	B2	1.30E+01		4.0E+02		8.0E+01		8.0E+01	1.6E-01		
B70A	PEST	4,4'-DDE	72-55-9	B2	1.90E-02	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	9.5E-03	9.5E-09	8.3E-04
B70A	INORG	Antimony	7440-36-0	ID	3.20E+00		3.1E+01				3.1E+01	1.0E-01		**1.0E-01**
B70A	INORG	Arsenic	7440-38-2	A	1.63E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.8E-01		
B70A	INORG	Barium	7440-39-3	NC	9.45E+01		1.5E+04				1.5E+04	6.3E-03		6.3E-03
B70A	INORG	Cadmium	7440-43-9	B1	1.05E+00	2.1E+03	7.1E+01	9.1E+02	7.1E+01		7.1E+01	1.5E-02	1.2E-09	1.5E-02
B70A	INORG	Chromium (total)	7440-47-3		2.96E+01		1.2E+05				1.2E+05	2.5E-04		2.5E-04
B70A	INORG	Cobalt	7440-48-4	LC	9.06E+00	4.2E+02	2.3E+01				2.3E+01	3.9E-01	2.2E-08	**3.9E-01**
B70A	INORG	Copper	7440-50-8	D	1.90E+01		3.1E+03				3.1E+03	6.1E-03		6.1E-03
B70A	INORG	Lead	7439-92-1	B2	1.46E+01		4.0E+02		8.0E+01		8.0E+01	1.8E-01		
B70A	INORG	Molybdenum	7439-98-7		7.30E-01		3.9E+02				3.9E+02	1.9E-03		1.9E-03
B70A	INORG	Nickel	7440-02-0	A	1.92E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	2.3E-02	1.3E-09	2.3E-02
B70A	INORG	Selenium	7782-49-2	D	1.45E+00		3.9E+02				3.9E+02	3.7E-03		3.7E-03
B70A	INORG	Vanadium	7440-62-2	ID	5.12E+01		3.9E+02				3.9E+02	1.3E-01		**1.3E-01**
B70A	INORG	Zinc	7440-66-6	ID	6.76E+01		2.3E+04				2.3E+04	2.9E-03		2.9E-03
B70BB	INORG	Arsenic	7440-38-2	A	2.23E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.0E-01		
B71	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B71	INORG	Lead	7439-92-1	B2	6.90E+00		4.0E+02		8.0E+01		8.0E+01	8.6E-02		
B72	INORG	Arsenic	7440-38-2	A	1.90E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.8E-01		
B72	INORG	Lead	7439-92-1	B2	8.00E+00		4.0E+02		8.0E+01		8.0E+01	1.0E-01		
B73	INORG	Arsenic	7440-38-2	A	1.70E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.1E-01		
B73	INORG	Lead	7439-92-1	B2	6.80E+00		4.0E+02		8.0E+01		8.0E+01	8.5E-02		
B74	INORG	Arsenic	7440-38-2	A	2.20E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.9E-01		
B74	INORG	Lead	7439-92-1	B2	9.20E+00		4.0E+02		8.0E+01		8.0E+01	1.2E-01		
B79	INORG	Arsenic	7440-38-2	A	2.06E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	7.4E-01		
B79	INORG	Lead	7439-92-1	B2	2.41E+01		4.0E+02		8.0E+01		8.0E+01	3.0E-01		

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B80	INORG	Arsenic	7440-38-2	A	1.52E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.4E-01		
B80	INORG	Lead	7439-92-1	B2	2.99E+01		4.0E+02		8.0E+01		8.0E+01	3.7E-01		
B81	INORG	Arsenic	7440-38-2	A	1.27E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.5E-01		
B81	INORG	Lead	7439-92-1	B2	1.47E+01		4.0E+02		8.0E+01		8.0E+01	1.8E-01		
B82	INORG	Arsenic	7440-38-2	A	1.19E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.3E-01		
B82	INORG	Lead	7439-92-1	B2	1.70E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B83	PEST	gamma-BHC	58-89-9	B2-C	4.45E-03	5.7E-01	2.1E+01	5.7E-01	2.1E+01		5.7E-01	7.8E-03	7.8E-09	2.1E-04
B83	PEST	4,4'-DDE	72-55-9	B2	3.40E-03	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	1.7E-03	1.7E-09	1.5E-04
B83	PEST	4,4'-DDT	50-29-3	B2	5.55E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	2.9E-03	2.9E-09	1.5E-04
B83	INORG	Arsenic	7440-38-2	A	2.38E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	8.5E-01		
B83	INORG	Lead	7439-92-1	B2	5.36E+01		4.0E+02		8.0E+01		8.0E+01	6.7E-01		
B83A	INORG	Lead	7439-92-1	B2	1.26E+01		4.0E+02		8.0E+01		8.0E+01	1.6E-01		
B83B	INORG	Lead	7439-92-1	B2	9.20E+00		4.0E+02		8.0E+01		8.0E+01	1.2E-01		
B83C	INORG	Lead	7439-92-1	B2	2.80E+01		4.0E+02		8.0E+01		8.0E+01	3.5E-01		
B83D	INORG	Lead	7439-92-1	B2	3.92E+01		4.0E+02		8.0E+01		8.0E+01	4.9E-01		
B84	INORG	Arsenic	7440-38-2	A	2.71E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	9.7E-01		
B84	INORG	Lead	7439-92-1	B2	4.79E+01		4.0E+02		8.0E+01		8.0E+01	6.0E-01		
B85	VOC	Acetone	67-64-1	ID	2.20E-01		6.1E+04				6.1E+04	3.6E-06		3.6E-06
B85	VOC	Benzene	71-43-2	A	1.40E-03	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	4.2E-03	4.2E-09	1.3E-04
B85	VOC	2-Butanone	78-93-3	ID	1.70E-02		2.7E+04				2.7E+04	6.3E-07		6.3E-07
B85	VOC	Ethyl Benzene	100-41-4	D	3.75E-04	5.8E+00	3.4E+03				5.8E+00	6.5E-05	6.5E-11	1.1E-07
B85	VOC	tert Butyl alcohol	75-65-0		1.25E-02									
B85	VOC	Toluene	108-88-3	ID	1.25E-03		4.9E+03		1.1E+03		1.1E+03	1.1E-06		1.1E-06
B85	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.74E-03		3.0E+02				3.0E+02	5.8E-06		5.8E-06
B85	VOC	Xylenes (total)	1330-20-7	ID	1.92E-03		5.8E+02				5.8E+02	3.3E-06		3.3E-06
B85	INORG	Arsenic	7440-38-2	A	1.44E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.1E-01		
B85	INORG	Lead	7439-92-1	B2	2.94E+01		4.0E+02		8.0E+01		8.0E+01	3.7E-01		
B86	VOC	Acetone	67-64-1	ID	2.60E-01		6.1E+04				6.1E+04	4.3E-06		4.3E-06
B86	VOC	Benzene	71-43-2	A	8.30E-04	1.2E+00	8.2E+01	3.3E-01	1.1E+01		3.3E-01	2.5E-03	2.5E-09	7.5E-05
B86	VOC	2-Butanone	78-93-3	ID	2.10E-02		2.7E+04				2.7E+04	7.8E-07		7.8E-07
B86	VOC	Ethyl Benzene	100-41-4	D	3.50E-04	5.8E+00	3.4E+03				5.8E+00	6.0E-05	6.0E-11	1.0E-07
B86	VOC	Toluene	108-88-3	ID	1.50E-03		4.9E+03		1.1E+03		1.1E+03	1.4E-06		1.4E-06
B86	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	5.40E-04		3.0E+02				3.0E+02	1.8E-06		1.8E-06
B86	VOC	Xylenes (total)	1330-20-7	ID	1.83E-03		5.8E+02				5.8E+02	3.2E-06		3.2E-06
B86	PEST	4,4'-DDT	50-29-3	B2	2.30E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	1.2E-03	1.2E-09	6.2E-05
B86	INORG	Arsenic	7440-38-2	A	1.51E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.4E-01		
B86	INORG	Lead	7439-92-1	B2	1.78E+01		4.0E+02		8.0E+01		8.0E+01	2.2E-01		
B90	PEST	4,4'-DDD	72-54-8	B2	7.00E-03	2.3E+00	1.9E+00	2.3E+00	1.9E+00		1.9E+00	3.7E-03	3.0E-09	3.7E-03
B90	PEST	4,4'-DDE	72-55-9	B2	2.90E-01	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	1.5E-01	1.5E-07	1.3E-02
B90	INORG	Arsenic	7440-38-2	A	1.50E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.4E-01		
B90	INORG	Lead	7439-92-1	B2	5.30E+01		4.0E+02		8.0E+01		8.0E+01	6.6E-01		
B91	INORG	Arsenic	7440-38-2	A	9.70E+00	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	3.5E-01		
B91	INORG	Lead	7439-92-1	B2	8.70E+00		4.0E+02		8.0E+01		8.0E+01	1.1E-01		
B91A	INORG	Lead	7439-92-1	B2	1.64E+01		4.0E+02		8.0E+01		8.0E+01	2.1E-01		
B91BB	INORG	Lead	7439-92-1	B2	5.98E+00		4.0E+02		8.0E+01		8.0E+01	7.5E-02		
B91C	INORG	Lead	7439-92-1	B2	6.84E+00		4.0E+02		8.0E+01		8.0E+01	8.6E-02		
B92	PEST	4,4'-DDE	72-55-9	B2	1.19E-02	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	5.9E-03	5.9E-09	5.2E-04
B92	INORG	Arsenic	7440-38-2	A	1.85E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	6.6E-01		

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ
B92	INORG	Lead	7439-92-1	B2	1.30E+01		4.0E+02		8.0E+01		8.0E+01	1.6E-01		
B93	PEST	4,4'-DDE	72-55-9	B2	1.20E-01	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	6.0E-02	6.0E-08	5.2E-03
B93	INORG	Arsenic	7440-38-2	A	1.60E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	5.7E-01		
B93	INORG	Lead	7439-92-1	B2	3.70E+01		4.0E+02		8.0E+01		8.0E+01	4.6E-01		
B94	INORG	Arsenic	7440-38-2	A	1.29E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.6E-01		
B94	INORG	Lead	7439-92-1	B2	7.19E+00		4.0E+02		8.0E+01		8.0E+01	9.0E-02		
B95	INORG	Arsenic	7440-38-2	A	1.24E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.4E-01		
B95	INORG	Lead	7439-92-1	B2	1.03E+01		4.0E+02		8.0E+01		8.0E+01	1.3E-01		
B96	INORG	Arsenic	7440-38-2	A	1.21E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.3E-01		
B96	INORG	Lead	7439-92-1	B2	2.96E+01		4.0E+02		8.0E+01		8.0E+01	3.7E-01		
B97	INORG	Arsenic	7440-38-2	A	1.21E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.3E-01		
B97	INORG	Lead	7439-92-1	B2	6.99E+00		4.0E+02		8.0E+01		8.0E+01	8.7E-02		
B98	PEST	4,4'-DDT	50-29-3	B2	7.40E-03	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	3.9E-03	3.9E-09	2.0E-04
B98	PEST	Dieldrin	60-57-1	B2	7.90E-03	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	2.3E-01	**2.3E-07**	2.5E-03
B98	INORG	Antimony	7440-36-0	ID	1.77E+00		3.1E+01				3.1E+01	5.7E-02		5.7E-02
B98	INORG	Arsenic	7440-38-2	A	1.37E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.9E-01		
B98	INORG	Barium	7440-39-3	NC	1.38E+02		1.5E+04				1.5E+04	9.2E-03		9.2E-03
B98	INORG	Cadmium	7440-43-9	B1	2.55E+00	2.1E+03	7.1E+01	9.1E+02	7.1E+01		7.1E+01	3.6E-02	2.8E-09	3.6E-02
B98	INORG	Chromium (total)	7440-47-3		4.18E+01		1.2E+05				1.2E+05	3.5E-04		3.5E-04
B98	INORG	Cobalt	7440-48-4	LC	1.31E+01	4.2E+02	2.3E+01				2.3E+01	5.7E-01	3.1E-08	**5.7E-01**
B98	INORG	Copper	7440-50-8	D	2.96E+01		3.1E+03				3.1E+03	9.5E-03		9.5E-03
B98	INORG	Lead	7439-92-1	B2	3.13E+01		4.0E+02		8.0E+01		8.0E+01	3.9E-01		
B98	INORG	Mercury	7439-97-6	D	4.00E-02		1.1E+01		1.0E+00		1.0E+00	4.0E-02		4.0E-02
B98	INORG	Molybdenum	7439-98-7		2.15E+00		3.9E+02				3.9E+02	5.5E-03		5.5E-03
B98	INORG	Nickel	7440-02-0	A	3.32E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.0E-02	2.2E-09	4.0E-02
B98	INORG	Thallium	7440-28-0	ID	1.29E+00									
B98	INORG	Vanadium	7440-62-2	ID	7.78E+01		3.9E+02				3.9E+02	2.0E-01		**2.0E-01**
B98	INORG	Zinc	7440-66-6	ID	8.97E+01		2.3E+04				2.3E+04	3.9E-03		3.9E-03
B99	PEST	Chlordane (total)	57-74-9	B2	6.40E-02	1.7E+00	3.5E+01	1.7E+00	3.5E+01		1.7E+00	3.8E-02	3.8E-08	1.8E-03
B99	PEST	4,4'-DDD	72-54-8	B2	3.30E-03	2.3E+00	1.9E+00	2.3E+00	1.9E+00		1.9E+00	1.7E-03	1.4E-09	1.7E-03
B99	PEST	4,4'-DDE	72-55-9	B2	1.46E-02	2.0E+00	2.3E+01	2.0E+00	2.3E+01		2.0E+00	7.3E-03	7.3E-09	6.3E-04
B99	PEST	4,4'-DDT	50-29-3	B2	2.68E-02	1.9E+00	3.7E+01	1.9E+00	3.7E+01		1.9E+00	1.4E-02	1.4E-08	7.2E-04
B99	PEST	Dieldrin	60-57-1	B2	6.20E-03	3.4E-02	3.2E+00	3.4E-02	3.2E+00		3.4E-02	1.8E-01	**1.8E-07**	1.9E-03
B99	PDIST	Diesel Range Organics	DRO		8.00E+00									
B99	INORG	Antimony	7440-36-0	ID	2.92E+00		3.1E+01				3.1E+01	9.4E-02		9.4E-02
B99	INORG	Arsenic	7440-38-2	A	1.21E+01	6.8E-01	3.5E+01	1.1E-01	4.1E-01	2.8E+01	2.8E+01	4.3E-01		
B99	INORG	Barium	7440-39-3	NC	2.12E+02		1.5E+04				1.5E+04	1.4E-02		1.4E-02
B99	INORG	Cadmium	7440-43-9	B1	2.73E+00	2.1E+03	7.1E+01	9.1E+02	7.1E+01		7.1E+01	3.8E-02	3.0E-09	3.8E-02
B99	INORG	Chromium (total)	7440-47-3		4.66E+01		1.2E+05				1.2E+05	3.9E-04		3.9E-04
B99	INORG	Cobalt	7440-48-4	LC	1.36E+01	4.2E+02	2.3E+01				2.3E+01	5.9E-01	3.2E-08	**5.9E-01**
B99	INORG	Copper	7440-50-8	D	3.10E+01		3.1E+03				3.1E+03	1.0E-02		1.0E-02
B99	INORG	Lead	7439-92-1	B2	2.41E+01		4.0E+02		8.0E+01		8.0E+01	3.0E-01		
B99	INORG	Molybdenum	7439-98-7		2.24E+00		3.9E+02				3.9E+02	5.7E-03		5.7E-03
B99	INORG	Nickel	7440-02-0	A	3.51E+01	1.5E+04	1.5E+03	1.5E+04	8.2E+02		8.2E+02	4.3E-02	2.3E-09	4.3E-02
B99	INORG	Thallium	7440-28-0	ID	2.27E+00									
B99	INORG	Vanadium	7440-62-2	ID	9.21E+01		3.9E+02				3.9E+02	2.4E-01		**2.4E-01**
B99	INORG	Zinc	7440-66-6	ID	8.28E+01		2.3E+04				2.3E+04	3.6E-03		3.6E-03

Table H-2
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/kg)	Residential Carc RSL (mg/kg)	Residential NonCarc RSL (mg/kg)	DTSC Residential Soil Screening Level Cancer (mg/kg)	DTSC Residential Soil Screening Level Noncancer (mg/kg)	Site-Specific Arsenic Cleanup Goal (mg/kg)	Residential Soil Screening Level (mg/kg)	Ratio of Max Detect to Residential Soil Screening Level	Cancer Risk	HQ

Notes:
Only chemicals detected at each location are shown.
Exposure concentrations conservatively calculated using the maximum detected soil concentrations observed at each location, regardless of depth.
Arsenic cleanup goal described and calculated in Terraphase (2019), Appendix G.
The screening levels for soil are the lower of the screening levels at either the target cancer risk of 1E-6 or target hazard quotient of 1
The screening levels for Chromium (total) are the screening levels provided by the agency for Chromium III, unless otherwise noted
The USEPA RSL for thallium was not used since it is based upon a Provisional Peer-Reviewed Toxicity Value (PPRTV) Appendix (Screening Value) toxicity value
Ratios of concentration to the screening level greater than 1 are shaded in bold.
Chemical-specific risks are scaled off of the cancer-based residential soil screening levels. Chemical-specific risks above $1x1C^{7}$ are shaded in bold.
Chemical-specific risks are scaled off of the noncancer-based residential soil screening levels. Chemical-specific HQs above 0.1 are shaded in bold
The concentrations for the Chlordane isomers (alpha and gamma) were summed to Chlordane (total).
The concentrations for the Xylene isomers (m/p and o) were summed to Xylenes (total).
Chem Group - chemical group
Carc Class - USEPA Weight-of-Evidence Cancer Classification

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B01	VOC	Bromodichloromethane	75-27-4	B2	9.00E-03	3.8E-02		3.8E-02	4.2E+01	3.8E-02	2.4E-01	**2.4E-07**	2.2E-04
B01	VOC	tert-Butylbenzene	98-06-6		1.70E-02				2.1E+02	2.1E+02	8.1E-05		8.1E-05
B01	VOC	Cumene	98-82-8	D	1.60E-02		2.1E+02			2.1E+02	7.6E-05		7.6E-05
B01	VOC	p-Cymene	99-87-6	ID	6.50E-02								
B01	VOC	Dibromochloromethane	124-48-1	C	1.20E-02			6.5E-02	4.2E+01	6.5E-02	1.8E-01	**1.8E-07**	2.9E-04
B01	VOC	Toluene	108-88-3	ID	3.30E-02		2.6E+03		1.6E+02	1.6E+02	2.1E-04		2.1E-04
B01	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.50E-02		3.2E+01			3.2E+01	4.8E-04		4.8E-04
B01	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	6.50E-03		3.2E+01			3.2E+01	2.1E-04		2.1E-04
B02	VOC	Benzene	71-43-2	A	1.60E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	3.3E-01	**3.3E-07**	1.0E-02
B02	VOC	n-Butylbenzene	104-51-8	ID	9.00E-03				1.1E+02	1.1E+02	8.6E-05		8.6E-05
B02	VOC	sec-Butylbenzene	135-98-8		1.00E-02				2.1E+02	2.1E+02	4.8E-05		4.8E-05
B02	VOC	tert-Butylbenzene	98-06-6		1.00E-02				2.1E+02	2.1E+02	4.8E-05		4.8E-05
B02	VOC	Cumene	98-82-8	D	1.30E-02		2.1E+02			2.1E+02	6.2E-05		6.2E-05
B02	VOC	p-Cymene	99-87-6	ID	1.60E-02								
B02	VOC	1,4-Dichlorobenzene	106-46-7	C	9.00E-03	1.3E-01	4.2E+02			1.3E-01	6.9E-02	6.9E-08	2.2E-05
B02	VOC	Styrene	100-42-5		9.00E-03		5.0E+02		4.7E+02	4.7E+02	1.9E-05		1.9E-05
B02	VOC	Tetrachloroethene	127-18-4	LC	1.20E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	5.2E-02	5.2E-08	5.7E-04
B02	VOC	Toluene	108-88-3	ID	2.90E-02		2.6E+03		1.6E+02	1.6E+02	1.9E-04		1.9E-04
B02	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.40E-02		3.2E+01			3.2E+01	4.4E-04		4.4E-04
B02	VOC	Xylenes (total)	1330-20-7	ID	3.40E-02		5.0E+01			5.0E+01	6.8E-04		6.8E-04
B04	VOC	Benzene	71-43-2	A	9.00E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	1.9E-01	**1.9E-07**	5.8E-03
B04	VOC	Ethyl Benzene	100-41-4	D	8.54E-03	5.5E-01	5.0E+02			5.5E-01	1.6E-02	1.6E-08	1.7E-05
B04	VOC	Tetrachloroethene	127-18-4	LC	3.43E-01	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	**1.5E+00**	**1.5E-06**	1.6E-02
B04	VOC	Toluene	108-88-3	ID	2.40E-02		2.6E+03		1.6E+02	1.6E+02	1.5E-04		1.5E-04
B04	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.70E-02		3.2E+01			3.2E+01	5.4E-04		5.4E-04
B04	VOC	Xylenes (total)	1330-20-7	ID	4.40E-02		5.0E+01			5.0E+01	8.8E-04		8.8E-04
B04A	VOC	Tetrachloroethene	127-18-4	LC	1.90E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	8.3E-02	8.3E-08	9.0E-04
B04A	VOC	Toluene	108-88-3	ID	5.30E-02		2.6E+03		1.6E+02	1.6E+02	3.4E-04		3.4E-04
B04A	VOC	Xylenes (total)	1330-20-7	ID	3.60E-02		5.0E+01			5.0E+01	7.2E-04		7.2E-04
B04C	VOC	p-Cymene	99-87-6	ID	2.70E-02								
B04C	VOC	Ethyl Benzene	100-41-4	D	1.20E-02	5.5E-01	5.0E+02			5.5E-01	2.2E-02	2.2E-08	2.4E-05
B04C	VOC	Tetrachloroethene	127-18-4	LC	1.10E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	4.8E-02	4.8E-08	5.2E-04
B04C	VOC	Toluene	108-88-3	ID	6.10E-02		2.6E+03		1.6E+02	1.6E+02	3.9E-04		3.9E-04
B04C	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	2.60E-02		3.2E+01			3.2E+01	8.3E-04		8.3E-04
B04C	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.60E-02		3.2E+01			3.2E+01	5.1E-04		5.1E-04
B04C	VOC	Xylenes (total)	1330-20-7	ID	5.10E-02		5.0E+01			5.0E+01	1.0E-03		1.0E-03
B04D	VOC	Benzene	71-43-2	A	5.25E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	1.1E-01	1.1E-07	3.4E-03
B04D	VOC	n-Butylbenzene	104-51-8	ID	4.05E-03				1.1E+02	1.1E+02	3.9E-05		3.9E-05
B04D	VOC	tert-Butylbenzene	98-06-6		4.25E-03				2.1E+02	2.1E+02	2.0E-05		2.0E-05
B04D	VOC	Cumene	98-82-8	D	3.25E-03		2.1E+02			2.1E+02	1.5E-05		1.5E-05
B04D	VOC	p-Cymene	99-87-6	ID	3.15E-03								
B04D	VOC	Ethyl Benzene	100-41-4	D	5.15E-03	5.5E-01	5.0E+02			5.5E-01	9.4E-03	9.4E-09	1.0E-05
B04D	VOC	n-Propylbenzene	103-65-1	ID	3.10E-03		5.0E+02			5.0E+02	6.2E-06		6.2E-06

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B04D	VOC	Styrene	100-42-5		2.60E-03		5.0E+02		4.7E+02	4.7E+02	5.5E-06		5.5E-06
B04D	VOC	Tetrachloroethene	127-18-4	LC	8.60E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	3.7E-02	3.7E-08	4.1E-04
B04D	VOC	Toluene	108-88-3	ID	2.08E-02		2.6E+03		1.6E+02	1.6E+02	1.3E-04		1.3E-04
B04D	VOC	Trichlorofluoromethane	75-69-4	ID	4.70E-03				6.5E+02	6.5E+02	7.2E-06		7.2E-06
B04D	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.30E-02		3.2E+01			3.2E+01	4.1E-04		4.1E-04
B04D	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.12E-02		3.2E+01			3.2E+01	3.6E-04		3.6E-04
B04D	VOC	Xylenes (total)	1330-20-7	ID	1.90E-02		5.0E+01			5.0E+01	3.8E-04		3.8E-04
B05	VOC	Cumene	98-82-8	D	2.10E-02		2.1E+02			2.1E+02	1.0E-04		1.0E-04
B05	VOC	p-Cymene	99-87-6	ID	1.50E-02								
B05	VOC	Tetrachloroethene	127-18-4	LC	1.20E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	5.2E-02	5.2E-08	5.7E-04
B05	VOC	Toluene	108-88-3	ID	2.00E-02		2.6E+03		1.6E+02	1.6E+02	1.3E-04		1.3E-04
B110	VOC	Benzene	71-43-2	A	2.36E-01	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	**4.9E+00**	**4.9E-06**	**1.5E-01**
B110	VOC	p-Cymene	99-87-6	ID	1.90E-02								
B110	VOC	Ethyl Benzene	100-41-4	D	4.98E-01	5.5E-01	5.0E+02			5.5E-01	9.1E-01	**9.1E-07**	1.0E-03
B110	VOC	n-Propylbenzene	103-65-1	ID	4.50E-02		5.0E+02			5.0E+02	9.0E-05		9.0E-05
B110	VOC	Toluene	108-88-3	ID	2.62E+00		2.6E+03		1.6E+02	1.6E+02	1.7E-02		1.7E-02
B110	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.73E-01		3.2E+01			3.2E+01	5.5E-03		5.5E-03
B110	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	6.60E-02		3.2E+01			3.2E+01	2.1E-03		2.1E-03
B110	VOC	Xylenes (total)	1330-20-7	ID	2.57E+00		5.0E+01			5.0E+01	5.1E-02		5.1E-02
B111	VOC	Benzene	71-43-2	A	1.63E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	3.4E-01	**3.4E-07**	1.0E-02
B111	VOC	tert-Butylbenzene	98-06-6		4.45E-03				2.1E+02	2.1E+02	2.1E-05		2.1E-05
B111	VOC	Chloroform	67-66-3	B2	2.75E-03	6.0E-02	5.0E+01			6.0E-02	4.6E-02	4.6E-08	5.5E-05
B111	VOC	Cumene	98-82-8	D	3.70E-03		2.1E+02			2.1E+02	1.8E-05		1.8E-05
B111	VOC	p-Cymene	99-87-6	ID	4.00E-03								
B111	VOC	Dichlorodifluoromethane	75-71-8	ID	2.85E-03		5.0E+01			5.0E+01	5.7E-05		5.7E-05
B111	VOC	Ethyl Benzene	100-41-4	D	1.13E-02	5.5E-01	5.0E+02			5.5E-01	2.0E-02	2.0E-08	2.3E-05
B111	VOC	n-Propylbenzene	103-65-1	ID	3.20E-03		5.0E+02			5.0E+02	6.4E-06		6.4E-06
B111	VOC	Styrene	100-42-5		2.85E-03		5.0E+02		4.7E+02	4.7E+02	6.1E-06		6.1E-06
B111	VOC	Tetrachloroethene	127-18-4	LC	7.20E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	3.1E-02	3.1E-08	3.4E-04
B111	VOC	Toluene	108-88-3	ID	2.90E-02		2.6E+03		1.6E+02	1.6E+02	1.9E-04		1.9E-04
B111	VOC	Trichlorofluoromethane	75-69-4	ID	4.50E-03				6.5E+02	6.5E+02	6.9E-06		6.9E-06
B111	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	2.18E-02		3.2E+01			3.2E+01	6.9E-04		6.9E-04
B111	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	9.00E-03		3.2E+01			3.2E+01	2.9E-04		2.9E-04
B111	VOC	Xylenes (total)	1330-20-7	ID	9.10E-02		5.0E+01			5.0E+01	1.8E-03		1.8E-03
B112	VOC	Benzene	71-43-2	A	5.40E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	**1.1E+00**	**1.1E-06**	3.5E-02
B112	VOC	Ethyl Benzene	100-41-4	D	1.20E-02	5.5E-01	5.0E+02			5.5E-01	2.2E-02	2.2E-08	2.4E-05
B112	VOC	Toluene	108-88-3	ID	7.80E-02		2.6E+03		1.6E+02	1.6E+02	5.0E-04		5.0E-04
B112	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.40E-02		3.2E+01			3.2E+01	4.4E-04		4.4E-04
B112	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.30E-02		3.2E+01			3.2E+01	4.1E-04		4.1E-04
B112	VOC	Xylenes (total)	1330-20-7	ID	6.70E-02		5.0E+01			5.0E+01	1.3E-03		1.3E-03
B113	VOC	Acetone	67-64-1	ID	1.08E-01		1.6E+04			1.6E+04	6.8E-06		6.8E-06
B113	VOC	Acrolein	107-02-8	ID	2.80E-03		1.1E-02			1.1E-02	2.7E-01		**2.7E-01**
B113	VOC	Benzene	71-43-2	A	6.40E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	1.3E-01	1.3E-07	4.1E-03

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B113	VOC	Bromodichloromethane	75-27-4	B2	1.20E-02	3.8E-02		3.8E-02	4.2E+01	3.8E-02	3.2E-01	**3.2E-07**	2.9E-04
B113	VOC	Bromoform	75-25-2	B2	8.50E-03	1.3E+00		1.3E+00	4.2E+01	1.3E+00	6.5E-03	6.5E-09	2.0E-04
B113	VOC	2-Butanone	78-93-3	ID	1.47E-02		2.6E+03			2.6E+03	5.7E-06		5.7E-06
B113	VOC	n-Butylbenzene	104-51-8	ID	4.60E-03				1.1E+02	1.1E+02	4.4E-05		4.4E-05
B113	VOC	sec-Butylbenzene	135-98-8		1.50E-03				2.1E+02	2.1E+02	7.1E-06		7.1E-06
B113	VOC	Carbon Disulfide	75-15-0		7.00E-03		3.7E+02			3.7E+02	1.9E-05		1.9E-05
B113	VOC	Chloroform	67-66-3	B2	6.20E-03	6.0E-02	5.0E+01			6.0E-02	1.0E-01	1.0E-07	1.2E-04
B113	VOC	Cumene	98-82-8	D	4.60E-03		2.1E+02			2.1E+02	2.2E-05		2.2E-05
B113	VOC	p-Cymene	99-87-6	ID	2.37E-01								
B113	VOC	Dibromochloromethane	124-48-1	C	1.66E-02			6.5E-02	4.2E+01	6.5E-02	2.6E-01	**2.6E-07**	4.0E-04
B113	VOC	Dichlorodifluoromethane	75-71-8	ID	2.50E-03		5.0E+01			5.0E+01	5.0E-05		5.0E-05
B113	VOC	Acetic acid, ethyl ester	141-78-6		2.74E-02		3.7E+01			3.7E+01	7.5E-04		7.5E-04
B113	VOC	Ethyl Benzene	100-41-4	D	1.28E-02	5.5E-01	5.0E+02			5.5E-01	2.3E-02	2.3E-08	2.6E-05
B113	VOC	4-Ethyltoluene	622-96-8		1.78E-02								
B113	VOC	2-Hexanone	591-78-6	ID	3.90E-03		1.6E+01			1.6E+01	2.5E-04		2.5E-04
B113	VOC	4-Methyl-2-pentanone	108-10-1	ID	1.10E-03		1.6E+03			1.6E+03	7.1E-07		7.1E-07
B113	VOC	Methylene Chloride	75-09-2	LC	3.00E-03	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	6.0E-03	6.0E-09	1.4E-05
B113	VOC	n-Propylbenzene	103-65-1	ID	9.20E-03		5.0E+02			5.0E+02	1.8E-05		1.8E-05
B113	VOC	Propylene	115-07-1		3.70E-03		1.6E+03			1.6E+03	2.4E-06		2.4E-06
B113	VOC	Styrene	100-42-5		3.70E-03		5.0E+02		4.7E+02	4.7E+02	7.9E-06		7.9E-06
B113	VOC	Tetrachloroethene	127-18-4	LC	7.40E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	3.2E-02	3.2E-08	3.5E-04
B113	VOC	Tetrahydrofuran	109-99-9	SC	1.30E-03		1.1E+03			1.1E+03	1.2E-06		1.2E-06
B113	VOC	Toluene	108-88-3	ID	5.63E-02		2.6E+03		1.6E+02	1.6E+02	3.6E-04		3.6E-04
B113	VOC	Trichlorofluoromethane	75-69-4	ID	1.60E-03				6.5E+02	6.5E+02	2.5E-06		2.5E-06
B113	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	5.50E-02		3.2E+01			3.2E+01	1.7E-03		1.7E-03
B113	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.81E-02		3.2E+01			3.2E+01	5.7E-04		5.7E-04
B113	VOC	Xylenes (total)	1330-20-7	ID	6.77E-02		5.0E+01			5.0E+01	1.4E-03		1.4E-03
B113	SVOC	Naphthalene	91-20-3	C	5.60E-03	4.2E-02	1.6E+00			4.2E-02	1.3E-01	1.3E-07	3.6E-03
B114	VOC	Acetone	67-64-1	ID	6.69E-02		1.6E+04			1.6E+04	4.2E-06		4.2E-06
B114	VOC	Acrolein	107-02-8	ID	4.80E-03		1.1E-02			1.1E-02	4.6E-01		**4.6E-01**
B114	VOC	Benzene	71-43-2	A	2.30E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	4.7E-02	4.7E-08	1.5E-03
B114	VOC	Bromodichloromethane	75-27-4	B2	5.20E-03	3.8E-02		3.8E-02	4.2E+01	3.8E-02	1.4E-01	1.4E-07	1.3E-04
B114	VOC	Bromoform	75-25-2	B2	5.80E-03	1.3E+00		1.3E+00	4.2E+01	1.3E+00	4.5E-03	4.5E-09	1.4E-04
B114	VOC	2-Butanone	78-93-3	ID	8.30E-03		2.6E+03			2.6E+03	3.2E-06		3.2E-06
B114	VOC	n-Butylbenzene	104-51-8	ID	2.20E-03				1.1E+02	1.1E+02	2.1E-05		2.1E-05
B114	VOC	Carbon Disulfide	75-15-0		6.60E-03		3.7E+02			3.7E+02	1.8E-05		1.8E-05
B114	VOC	Chloroform	67-66-3	B2	3.60E-03	6.0E-02	5.0E+01			6.0E-02	6.0E-02	6.0E-08	7.2E-05
B114	VOC	Cumene	98-82-8	D	2.30E-03		2.1E+02			2.1E+02	1.1E-05		1.1E-05
B114	VOC	p-Cymene	99-87-6	ID	3.71E-02								
B114	VOC	Dibromochloromethane	124-48-1	C	7.90E-03			6.5E-02	4.2E+01	6.5E-02	1.2E-01	1.2E-07	1.9E-04
B114	VOC	Dichlorodifluoromethane	75-71-8	ID	2.40E-03		5.0E+01			5.0E+01	4.8E-05		4.8E-05
B114	VOC	Acetic acid, ethyl ester	141-78-6		2.28E-02		3.7E+01			3.7E+01	6.2E-04		6.2E-04
B114	VOC	Ethyl Benzene	100-41-4	D	1.18E-02	5.5E-01	5.0E+02			5.5E-01	2.1E-02	2.1E-08	2.4E-05

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B114	VOC	4-Ethyltoluene	622-96-8		4.30E-03								
B114	VOC	2-Hexanone	591-78-6	ID	2.90E-03		1.6E+01			1.6E+01	1.9E-04		1.9E-04
B114	VOC	Isopropanol	67-63-0	ID	1.40E-03		1.1E+02			1.1E+02	1.3E-05		1.3E-05
B114	VOC	4-Methyl-2-pentanone	108-10-1	ID	5.00E-03		1.6E+03			1.6E+03	3.2E-06		3.2E-06
B114	VOC	Methylene Chloride	75-09-2	LC	2.50E-03	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	5.0E-03	5.0E-09	1.2E-05
B114	VOC	n-Propylbenzene	103-65-1	ID	3.90E-03		5.0E+02			5.0E+02	7.8E-06		7.8E-06
B114	VOC	Propylene	115-07-1		6.40E-03		1.6E+03			1.6E+03	4.1E-06		4.1E-06
B114	VOC	Styrene	100-42-5		1.60E-03		5.0E+02		4.7E+02	4.7E+02	3.4E-06		3.4E-06
B114	VOC	Tetrachloroethene	127-18-4	LC	1.26E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	5.5E-02	5.5E-08	6.0E-04
B114	VOC	Toluene	108-88-3	ID	1.14E-02		2.6E+03		1.6E+02	1.6E+02	7.4E-05		7.4E-05
B114	VOC	Trichlorofluoromethane	75-69-4	ID	2.40E-03				6.5E+02	6.5E+02	3.7E-06		3.7E-06
B114	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	2.73E-02		3.2E+01			3.2E+01	8.7E-04		8.7E-04
B114	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.10E-02		3.2E+01			3.2E+01	3.5E-04		3.5E-04
B114	VOC	Xylenes (total)	1330-20-7	ID	7.89E-02		5.0E+01			5.0E+01	1.6E-03		1.6E-03
B115	VOC	Acetone	67-64-1	ID	3.69E-02		1.6E+04			1.6E+04	2.3E-06		2.3E-06
B115	VOC	Acrolein	107-02-8	ID	3.80E-03		1.1E-02			1.1E-02	3.6E-01		**3.6E-01**
B115	VOC	Benzene	71-43-2	A	1.12E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	2.3E-01	**2.3E-07**	7.2E-03
B115	VOC	Bromodichloromethane	75-27-4	B2	1.31E-02	3.8E-02		3.8E-02	4.2E+01	3.8E-02	3.4E-01	**3.4E-07**	3.2E-04
B115	VOC	Bromoform	75-25-2	B2	5.20E-03	1.3E+00		1.3E+00	4.2E+01	1.3E+00	4.0E-03	4.0E-09	1.3E-04
B115	VOC	2-Butanone	78-93-3	ID	6.20E-03		2.6E+03			2.6E+03	2.4E-06		2.4E-06
B115	VOC	n-Butylbenzene	104-51-8	ID	8.00E-03				1.1E+02	1.1E+02	7.6E-05		7.6E-05
B115	VOC	sec-Butylbenzene	135-98-8		1.70E-03				2.1E+02	2.1E+02	8.1E-06		8.1E-06
B115	VOC	Carbon Disulfide	75-15-0		1.01E-02		3.7E+02			3.7E+02	2.8E-05		2.8E-05
B115	VOC	Chloroform	67-66-3	B2	8.80E-03	6.0E-02	5.0E+01			6.0E-02	1.5E-01	1.5E-07	1.8E-04
B115	VOC	Cumene	98-82-8	D	6.10E-03		2.1E+02			2.1E+02	2.9E-05		2.9E-05
B115	VOC	Cyclohexane	110-82-7	ID	3.40E-03		3.2E+03			3.2E+03	1.1E-06		1.1E-06
B115	VOC	p-Cymene	99-87-6	ID	1.61E-01								
B115	VOC	Dibromochloromethane	124-48-1	C	1.43E-02			6.5E-02	4.2E+01	6.5E-02	2.2E-01	**2.2E-07**	3.4E-04
B115	VOC	Dichlorodifluoromethane	75-71-8	ID	2.70E-03		5.0E+01			5.0E+01	5.4E-05		5.4E-05
B115	VOC	Acetic acid, ethyl ester	141-78-6		1.27E-02		3.7E+01			3.7E+01	3.5E-04		3.5E-04
B115	VOC	Ethyl Benzene	100-41-4	D	7.63E-02	5.5E-01	5.0E+02			5.5E-01	1.4E-01	1.4E-07	1.5E-04
B115	VOC	4-Ethyltoluene	622-96-8		2.17E-02								
B115	VOC	2-Hexanone	591-78-6	ID	6.80E-03		1.6E+01			1.6E+01	4.4E-04		4.4E-04
B115	VOC	4-Methyl-2-pentanone	108-10-1	ID	3.90E-03		1.6E+03			1.6E+03	2.5E-06		2.5E-06
B115	VOC	Methylene Chloride	75-09-2	LC	1.60E-03	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	3.2E-03	3.2E-09	7.6E-06
B115	VOC	n-Propylbenzene	103-65-1	ID	1.11E-02		5.0E+02			5.0E+02	2.2E-05		2.2E-05
B115	VOC	Propylene	115-07-1		9.80E-03		1.6E+03			1.6E+03	6.3E-06		6.3E-06
B115	VOC	Styrene	100-42-5		6.90E-03		5.0E+02		4.7E+02	4.7E+02	1.5E-05		1.5E-05
B115	VOC	Tetrachloroethene	127-18-4	LC	8.70E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	3.8E-02	3.8E-08	4.1E-04
B115	VOC	Toluene	108-88-3	ID	1.00E-01		2.6E+03		1.6E+02	1.6E+02	6.5E-04		6.5E-04
B115	VOC	Trichlorofluoromethane	75-69-4	ID	2.60E-03				6.5E+02	6.5E+02	4.0E-06		4.0E-06
B115	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	7.73E-02		3.2E+01			3.2E+01	2.5E-03		2.5E-03
B115	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	3.46E-02		3.2E+01			3.2E+01	1.1E-03		1.1E-03

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B115	VOC	Xylenes (total)	1330-20-7	ID	4.86E-01		5.0E+01			5.0E+01	9.7E-03		9.7E-03
B115	SVOC	Naphthalene	91-20-3	C	3.03E-02	4.2E-02	1.6E+00			4.2E-02	7.3E-01	**7.3E-07**	2.0E-02
B116	VOC	Acetone	67-64-1	ID	8.58E-02		1.6E+04			1.6E+04	5.4E-06		5.4E-06
B116	VOC	Acrolein	107-02-8	ID	2.20E-03		1.1E-02			1.1E-02	2.1E-01		**2.1E-01**
B116	VOC	Benzene	71-43-2	A	2.70E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	5.6E-02	5.6E-08	1.7E-03
B116	VOC	Bromodichloromethane	75-27-4	B2	4.40E-03	3.8E-02		3.8E-02	4.2E+01	3.8E-02	1.2E-01	1.2E-07	1.1E-04
B116	VOC	Bromoform	75-25-2	B2	4.60E-03	1.3E+00		1.3E+00	4.2E+01	1.3E+00	3.5E-03	3.5E-09	1.1E-04
B116	VOC	2-Butanone	78-93-3	ID	6.80E-03		2.6E+03			2.6E+03	2.6E-06		2.6E-06
B116	VOC	n-Butylbenzene	104-51-8	ID	2.00E-03				1.1E+02	1.1E+02	1.9E-05		1.9E-05
B116	VOC	tert-Butylbenzene	98-06-6		1.35E-03				2.1E+02	2.1E+02	6.4E-06		6.4E-06
B116	VOC	Carbon Disulfide	75-15-0		5.85E-03		3.7E+02			3.7E+02	1.6E-05		1.6E-05
B116	VOC	Chloroform	67-66-3	B2	2.10E-03	6.0E-02	5.0E+01			6.0E-02	3.5E-02	3.5E-08	4.2E-05
B116	VOC	Cumene	98-82-8	D	2.10E-03		2.1E+02			2.1E+02	1.0E-05		1.0E-05
B116	VOC	Cyclohexane	110-82-7	ID	8.00E-04		3.2E+03			3.2E+03	2.5E-07		2.5E-07
B116	VOC	p-Cymene	99-87-6	ID	6.91E-02								
B116	VOC	Dibromochloromethane	124-48-1	C	7.10E-03			6.5E-02	4.2E+01	6.5E-02	1.1E-01	1.1E-07	1.7E-04
B116	VOC	Dichlorodifluoromethane	75-71-8	ID	2.55E-03		5.0E+01			5.0E+01	5.1E-05		5.1E-05
B116	VOC	Acetic acid, ethyl ester	141-78-6		1.52E-02		3.7E+01			3.7E+01	4.2E-04		4.2E-04
B116	VOC	Ethyl Benzene	100-41-4	D	8.50E-03	5.5E-01	5.0E+02			5.5E-01	1.5E-02	1.5E-08	1.7E-05
B116	VOC	4-Ethyltoluene	622-96-8		4.30E-03								
B116	VOC	2-Hexanone	591-78-6	ID	2.00E-03		1.6E+01			1.6E+01	1.3E-04		1.3E-04
B116	VOC	Isopropanol	67-63-0	ID	2.80E-03		1.1E+02			1.1E+02	2.7E-05		2.7E-05
B116	VOC	4-Methyl-2-pentanone	108-10-1	ID	3.90E-03		1.6E+03			1.6E+03	2.5E-06		2.5E-06
B116	VOC	Methylene Chloride	75-09-2	LC	2.60E-03	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	5.2E-03	5.2E-09	1.2E-05
B116	VOC	n-Propylbenzene	103-65-1	ID	3.00E-03		5.0E+02			5.0E+02	6.0E-06		6.0E-06
B116	VOC	Propylene	115-07-1		7.60E-03		1.6E+03			1.6E+03	4.9E-06		4.9E-06
B116	VOC	Styrene	100-42-5		1.70E-03		5.0E+02		4.7E+02	4.7E+02	3.6E-06		3.6E-06
B116	VOC	Tetrachloroethene	127-18-4	LC	4.40E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	1.9E-02	1.9E-08	2.1E-04
B116	VOC	Toluene	108-88-3	ID	2.42E-02		2.6E+03		1.6E+02	1.6E+02	1.6E-04		1.6E-04
B116	VOC	Trichlorofluoromethane	75-69-4	ID	1.65E-03				6.5E+02	6.5E+02	2.5E-06		2.5E-06
B116	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.91E-02		3.2E+01			3.2E+01	6.1E-04		6.1E-04
B116	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	7.80E-03		3.2E+01			3.2E+01	2.5E-04		2.5E-04
B116	VOC	Xylenes (total)	1330-20-7	ID	4.92E-02		5.0E+01			5.0E+01	9.8E-04		9.8E-04
B116	SVOC	Naphthalene	91-20-3	C	6.00E-03	4.2E-02	1.6E+00			4.2E-02	1.4E-01	1.4E-07	3.9E-03
B117	VOC	Benzene	71-43-2	A	1.60E-01	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	**3.3E+00**	**3.3E-06**	**1.0E-01**
B117	VOC	Carbon Disulfide	75-15-0		2.50E-02		3.7E+02			3.7E+02	6.8E-05		6.8E-05
B117	VOC	Ethyl Benzene	100-41-4	D	1.30E+00	5.5E-01	5.0E+02			5.5E-01	**2.4E+00**	**2.4E-06**	2.6E-03
B117	VOC	4-Ethyltoluene	622-96-8		5.10E-01								
B117	VOC	4-Methyl-2-pentanone	108-10-1	ID	1.60E-02		1.6E+03			1.6E+03	1.0E-05		1.0E-05
B117	VOC	Methylene Chloride	75-09-2	LC	2.00E-02	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	4.0E-02	4.0E-08	9.5E-05
B117	VOC	Tetrachloroethene	127-18-4	LC	7.30E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	3.2E-01	**3.2E-07**	3.5E-03
B117	VOC	Toluene	108-88-3	ID	4.60E+00		2.6E+03		1.6E+02	1.6E+02	3.0E-02		3.0E-02
B117	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.80E+00		3.2E+01			3.2E+01	5.7E-02		5.7E-02

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B117	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	6.30E-01		3.2E+01			3.2E+01	2.0E-02		2.0E-02
B117	VOC	Xylenes (total)	1330-20-7	ID	6.90E+00		5.0E+01			5.0E+01	1.4E-01		**1.4E-01**
B118	VOC	Chloroform	67-66-3	B2	9.50E-03	6.0E-02	5.0E+01			6.0E-02	1.6E-01	**1.6E-07**	1.9E-04
B118	VOC	Ethyl Benzene	100-41-4	D	4.80E-03	5.5E-01	5.0E+02			5.5E-01	8.7E-03	8.7E-09	9.6E-06
B118	VOC	Methylene Chloride	75-09-2	LC	1.10E-02	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	2.2E-02	2.2E-08	5.2E-05
B118	VOC	Tetrachloroethene	127-18-4	LC	1.15E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	5.0E-02	5.0E-08	5.5E-04
B118	VOC	Toluene	108-88-3	ID	1.70E-02		2.6E+03		1.6E+02	1.6E+02	1.1E-04		1.1E-04
B118	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	9.00E-03		3.2E+01			3.2E+01	2.9E-04		2.9E-04
B118	VOC	Xylenes (total)	1330-20-7	ID	2.33E-02		5.0E+01			5.0E+01	4.7E-04		4.7E-04
B119	VOC	Benzene	71-43-2	A	1.30E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	2.7E-01	**2.7E-07**	8.4E-03
B119	VOC	2-Butanone	78-93-3	ID	4.00E-02		2.6E+03			2.6E+03	1.5E-05		1.5E-05
B119	VOC	Carbon Disulfide	75-15-0		1.80E-02		3.7E+02			3.7E+02	4.9E-05		4.9E-05
B119	VOC	Chloroform	67-66-3	B2	9.10E-03	6.0E-02	5.0E+01			6.0E-02	1.5E-01	**1.5E-07**	1.8E-04
B119	VOC	Chloromethane	74-87-3	D	5.20E-03		4.7E+01			4.7E+01	1.1E-04		1.1E-04
B119	VOC	Ethyl Benzene	100-41-4	D	7.80E-03	5.5E-01	5.0E+02			5.5E-01	1.4E-02	1.4E-08	1.6E-05
B119	VOC	Methylene Chloride	75-09-2	LC	1.10E-02	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	2.2E-02	2.2E-08	5.2E-05
B119	VOC	Tetrachloroethene	127-18-4	LC	1.80E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	7.8E-02	7.8E-08	8.6E-04
B119	VOC	Toluene	108-88-3	ID	4.30E-02		2.6E+03		1.6E+02	1.6E+02	2.8E-04		2.8E-04
B119	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.10E-02		3.2E+01			3.2E+01	3.5E-04		3.5E-04
B119	VOC	Xylenes (total)	1330-20-7	ID	3.37E-02		5.0E+01			5.0E+01	6.7E-04		6.7E-04
B11DDD	VOC	Benzene	71-43-2	A	1.20E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	2.5E-01	**2.5E-07**	7.7E-03
B11DDD	VOC	Carbon Disulfide	75-15-0		2.30E-02		3.7E+02			3.7E+02	6.3E-05		6.3E-05
B11DDD	VOC	Methylene Chloride	75-09-2	LC	1.10E-02	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	2.2E-02	2.2E-08	5.2E-05
B11DDD	VOC	Toluene	108-88-3	ID	2.10E-02		2.6E+03		1.6E+02	1.6E+02	1.4E-04		1.4E-04
B11DDD	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	7.60E-03		3.2E+01			3.2E+01	2.4E-04		2.4E-04
B11DDD	VOC	Xylenes (total)	1330-20-7	ID	1.10E-02		5.0E+01			5.0E+01	2.2E-04		2.2E-04
B120	VOC	Benzene	71-43-2	A	8.30E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	1.7E-01	**1.7E-07**	5.4E-03
B120	VOC	Chloroform	67-66-3	B2	5.20E-03	6.0E-02	5.0E+01			6.0E-02	8.7E-02	8.7E-08	1.0E-04
B120	VOC	Ethyl Benzene	100-41-4	D	3.10E-02	5.5E-01	5.0E+02			5.5E-01	5.6E-02	5.6E-08	6.2E-05
B120	VOC	4-Ethyltoluene	622-96-8		1.20E-02								
B120	VOC	Methylene Chloride	75-09-2	LC	1.00E-02	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	2.0E-02	2.0E-08	4.8E-05
B120	VOC	Toluene	108-88-3	ID	8.70E-02		2.6E+03		1.6E+02	1.6E+02	5.6E-04		5.6E-04
B120	VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ID	1.00E-02		2.6E+03			2.6E+03	3.8E-06		3.8E-06
B120	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	4.90E-02		3.2E+01			3.2E+01	1.6E-03		1.6E-03
B120	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.40E-02		3.2E+01			3.2E+01	4.4E-04		4.4E-04
B120	VOC	Xylenes (total)	1330-20-7	ID	1.97E-01		5.0E+01			5.0E+01	3.9E-03		3.9E-03
B121	VOC	Benzene	71-43-2	A	3.80E-01	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	**7.8E+00**	**7.8E-06**	**2.5E-01**
B121	VOC	2-Butanone	78-93-3	ID	4.60E-02		2.6E+03			2.6E+03	1.8E-05		1.8E-05
B121	VOC	Carbon Disulfide	75-15-0		1.30E-02		3.7E+02			3.7E+02	3.6E-05		3.6E-05
B121	VOC	Ethyl Benzene	100-41-4	D	2.10E-02	5.5E-01	5.0E+02			5.5E-01	3.8E-02	3.8E-08	4.2E-05
B121	VOC	Methylene Chloride	75-09-2	LC	1.00E-02	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	2.0E-02	2.0E-08	4.8E-05
B121	VOC	Tetrachloroethene	127-18-4	LC	7.40E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	3.2E-02	3.2E-08	3.5E-04
B121	VOC	Toluene	108-88-3	ID	1.40E-01		2.6E+03		1.6E+02	1.6E+02	9.0E-04		9.0E-04

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B121	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.80E-02		3.2E+01			3.2E+01	5.7E-04		5.7E-04
B121	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	5.90E-03		3.2E+01			3.2E+01	1.9E-04		1.9E-04
B121	VOC	Xylenes (total)	1330-20-7	ID	9.50E-02		5.0E+01			5.0E+01	1.9E-03		1.9E-03
B22	VOC	Bromodichloromethane	75-27-4	B2	8.00E-03	3.8E-02		3.8E-02	4.2E+01	3.8E-02	2.1E-01	**2.1E-07**	1.9E-04
B22	VOC	Cumene	98-82-8	D	2.10E-02		2.1E+02			2.1E+02	1.0E-04		1.0E-04
B22	VOC	p-Cymene	99-87-6	ID	1.40E-02								
B22	VOC	Dibromochloromethane	124-48-1	C	1.20E-02			6.5E-02	4.2E+01	6.5E-02	1.8E-01	**1.8E-07**	2.9E-04
B22	VOC	Tetrachloroethene	127-18-4	LC	2.90E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	1.3E-01	1.3E-07	1.4E-03
B22	VOC	Toluene	108-88-3	ID	2.20E-02		2.6E+03		1.6E+02	1.6E+02	1.4E-04		1.4E-04
B22	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	8.00E-03		3.2E+01			3.2E+01	2.5E-04		2.5E-04
B22	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	8.00E-03		3.2E+01			3.2E+01	2.5E-04		2.5E-04
B23	VOC	p-Cymene	99-87-6	ID	1.00E-02								
B23	VOC	Dibromochloromethane	124-48-1	C	1.20E-02			6.5E-02	4.2E+01	6.5E-02	1.8E-01	**1.8E-07**	2.9E-04
B23	VOC	Tetrachloroethene	127-18-4	LC	4.10E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	1.8E-01	**1.8E-07**	2.0E-03
B23	VOC	Toluene	108-88-3	ID	9.00E-03		2.6E+03		1.6E+02	1.6E+02	5.8E-05		5.8E-05
B23	VOC	Xylenes (total)	1330-20-7	ID	1.60E-02		5.0E+01			5.0E+01	3.2E-04		3.2E-04
B24	VOC	Dibromochloromethane	124-48-1	C	1.00E-02			6.5E-02	4.2E+01	6.5E-02	1.5E-01	**1.5E-07**	2.4E-04
B24	VOC	Toluene	108-88-3	ID	9.00E-03		2.6E+03		1.6E+02	1.6E+02	5.8E-05		5.8E-05
B53	VOC	Benzene	71-43-2	A	1.50E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	3.1E-01	**3.1E-07**	9.7E-03
B53	VOC	Bromodichloromethane	75-27-4	B2	3.20E-03	3.8E-02		3.8E-02	4.2E+01	3.8E-02	8.4E-02	8.4E-08	7.7E-05
B53	VOC	Bromoform	75-25-2	B2	3.20E-03	1.3E+00		1.3E+00	4.2E+01	1.3E+00	2.5E-03	2.5E-09	7.7E-05
B53	VOC	Chloroform	67-66-3	B2	3.25E-03	6.0E-02	5.0E+01			6.0E-02	5.4E-02	5.4E-08	6.5E-05
B53	VOC	Dibromochloromethane	124-48-1	C	3.25E-03			6.5E-02	4.2E+01	6.5E-02	5.0E-02	5.0E-08	7.8E-05
B53	VOC	Dichlorodifluoromethane	75-71-8	ID	8.00E-03		5.0E+01			5.0E+01	1.6E-04		1.6E-04
B53	VOC	Ethyl Benzene	100-41-4	D	3.35E-03	5.5E-01	5.0E+02			5.5E-01	6.1E-03	6.1E-09	6.7E-06
B53	VOC	Toluene	108-88-3	ID	2.60E-02		2.6E+03		1.6E+02	1.6E+02	1.7E-04		1.7E-04
B53	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.00E-02		3.2E+01			3.2E+01	3.2E-04		3.2E-04
B53	VOC	Xylenes (total)	1330-20-7	ID	6.30E-03		5.0E+01			5.0E+01	1.3E-04		1.3E-04
B54	VOC	p-Cymene	99-87-6	ID	2.10E-02								
B54	VOC	Toluene	108-88-3	ID	1.40E-02		2.6E+03		1.6E+02	1.6E+02	9.0E-05		9.0E-05
B54	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.60E-02		3.2E+01			3.2E+01	5.1E-04		5.1E-04
B55	VOC	Benzene	71-43-2	A	1.08E+00	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	**2.2E+01**	**2.2E-05**	**7.0E-01**
B55	VOC	n-Butylbenzene	104-51-8	ID	5.00E-02				1.1E+02	1.1E+02	4.8E-04		4.8E-04
B55	VOC	Cumene	98-82-8	D	3.80E-02		2.1E+02			2.1E+02	1.8E-04		1.8E-04
B55	VOC	p-Cymene	99-87-6	ID	1.20E-02								
B55	VOC	Ethyl Benzene	100-41-4	D	1.00E+00	5.5E-01	5.0E+02			5.5E-01	**1.8E+00**	**1.8E-06**	2.0E-03
B55	VOC	n-Propylbenzene	103-65-1	ID	1.74E-01		5.0E+02			5.0E+02	3.5E-04		3.5E-04
B55	VOC	Toluene	108-88-3	ID	4.59E+00		2.6E+03		1.6E+02	1.6E+02	3.0E-02		3.0E-02
B55	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	7.55E-01		3.2E+01			3.2E+01	2.4E-02		2.4E-02
B55	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	2.99E-01		3.2E+01			3.2E+01	9.5E-03		9.5E-03
B55	VOC	Xylenes (total)	1330-20-7	ID	5.10E+00		5.0E+01			5.0E+01	1.0E-01		**1.0E-01**
B56	VOC	Benzene	71-43-2	A	2.96E-01	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	**6.1E+00**	**6.1E-06**	**1.9E-01**
B56	VOC	n-Butylbenzene	104-51-8	ID	7.30E-02				1.1E+02	1.1E+02	7.0E-04		7.0E-04

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B56	VOC	Cumene	98-82-8	D	1.20E-02		2.1E+02			2.1E+02	5.7E-05		5.7E-05
B56	VOC	Ethyl Benzene	100-41-4	D	2.39E-01	5.5E-01	5.0E+02			5.5E-01	4.3E-01	**4.3E-07**	4.8E-04
B56	VOC	n-Propylbenzene	103-65-1	ID	5.90E-02		5.0E+02			5.0E+02	1.2E-04		1.2E-04
B56	VOC	Toluene	108-88-3	ID	1.09E+00		2.6E+03		1.6E+02	1.6E+02	7.0E-03		7.0E-03
B56	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	4.18E-01		3.2E+01			3.2E+01	1.3E-02		1.3E-02
B56	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.39E-01		3.2E+01			3.2E+01	4.4E-03		4.4E-03
B56	VOC	Xylenes (total)	1330-20-7	ID	1.38E+00		5.0E+01			5.0E+01	2.8E-02		2.8E-02
B56	SVOC	Naphthalene	91-20-3	C	6.80E-02	4.2E-02	1.6E+00			4.2E-02	**1.6E+00**	**1.6E-06**	4.4E-02
B57	VOC	Benzene	71-43-2	A	1.70E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	3.5E-01	**3.5E-07**	1.1E-02
B57	VOC	n-Butylbenzene	104-51-8	ID	9.00E-03				1.1E+02	1.1E+02	8.6E-05		8.6E-05
B57	VOC	Cumene	98-82-8	D	1.00E-02		2.1E+02			2.1E+02	4.8E-05		4.8E-05
B57	VOC	p-Cymene	99-87-6	ID	1.10E-02								
B57	VOC	Tetrachloroethene	127-18-4	LC	1.00E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	4.3E-02	4.3E-08	4.8E-04
B57	VOC	Toluene	108-88-3	ID	2.40E-02		2.6E+03		1.6E+02	1.6E+02	1.5E-04		1.5E-04
B57	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.20E-02		3.2E+01			3.2E+01	3.8E-04		3.8E-04
B57	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	9.00E-03		3.2E+01			3.2E+01	2.9E-04		2.9E-04
B57	VOC	Xylenes (total)	1330-20-7	ID	3.00E-02		5.0E+01			5.0E+01	6.0E-04		6.0E-04
B58	VOC	p-Cymene	99-87-6	ID	9.00E-03								
B58	VOC	Dibromochloromethane	124-48-1	C	1.50E-02			6.5E-02	4.2E+01	6.5E-02	2.3E-01	**2.3E-07**	3.6E-04
B58	VOC	Tetrachloroethene	127-18-4	LC	1.30E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	5.7E-02	5.7E-08	6.2E-04
B58	VOC	Toluene	108-88-3	ID	1.60E-02		2.6E+03		1.6E+02	1.6E+02	1.0E-04		1.0E-04
B59	VOC	Benzene	71-43-2	A	5.20E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	1.1E-01	1.1E-07	3.4E-03
B59	VOC	Bromodichloromethane	75-27-4	B2	1.90E-02	3.8E-02		3.8E-02	4.2E+01	3.8E-02	5.0E-01	**5.0E-07**	4.6E-04
B59	VOC	Bromoform	75-25-2	B2	1.40E-02	1.3E+00		1.3E+00	4.2E+01	1.3E+00	1.1E-02	1.1E-08	3.4E-04
B59	VOC	Chloroform	67-66-3	B2	9.00E-03	6.0E-02	5.0E+01			6.0E-02	1.5E-01	**1.5E-07**	1.8E-04
B59	VOC	p-Cymene	99-87-6	ID	9.00E-03								
B59	VOC	Dibromochloromethane	124-48-1	C	2.70E-02			6.5E-02	4.2E+01	6.5E-02	4.2E-01	**4.2E-07**	6.5E-04
B59	VOC	Ethyl Benzene	100-41-4	D	3.20E-03	5.5E-01	5.0E+02			5.5E-01	5.8E-03	5.8E-09	6.4E-06
B59	VOC	Tetrachloroethene	127-18-4	LC	3.45E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	1.5E-02	1.5E-08	1.6E-04
B59	VOC	Toluene	108-88-3	ID	1.10E-02		2.6E+03		1.6E+02	1.6E+02	7.1E-05		7.1E-05
B59	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	3.35E-03		3.2E+01			3.2E+01	1.1E-04		1.1E-04
B59	VOC	Xylenes (total)	1330-20-7	ID	8.50E-03		5.0E+01			5.0E+01	1.7E-04		1.7E-04
B60	VOC	Benzene	71-43-2	A	2.54E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	5.2E-01	**5.2E-07**	1.6E-02
B60	VOC	p-Cymene	99-87-6	ID	1.20E-02								
B60	VOC	Dichlorodifluoromethane	75-71-8	ID	3.64E-03		5.0E+01			5.0E+01	7.3E-05		7.3E-05
B60	VOC	Ethyl Benzene	100-41-4	D	1.01E-02	5.5E-01	5.0E+02			5.5E-01	1.8E-02	1.8E-08	2.0E-05
B60	VOC	n-Heptane	142-82-5	ID	3.61E-02		2.1E+02			2.1E+02	1.7E-04		1.7E-04
B60	VOC	n-Hexane	110-54-3	ID	3.96E-02		3.7E+02			3.7E+02	1.1E-04		1.1E-04
B60	VOC	Methylene Chloride	75-09-2	LC	3.46E-03	5.0E+01	3.2E+02	5.0E-01	2.1E+02	5.0E-01	6.9E-03	6.9E-09	1.6E-05
B60	VOC	Tetrachloroethene	127-18-4	LC	3.03E-03	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	1.3E-02	1.3E-08	1.4E-04
B60	VOC	Toluene	108-88-3	ID	7.25E-02		2.6E+03		1.6E+02	1.6E+02	4.7E-04		4.7E-04
B60	VOC	1,1,2-Trichloroethane	79-00-5	C	6.91E-03	9.0E-02	1.1E-01			9.0E-02	7.7E-02	7.7E-08	6.6E-02
B60	VOC	Trichlorofluoromethane	75-69-4	ID	4.05E-03				6.5E+02	6.5E+02	6.2E-06		6.2E-06

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B60	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.70E-02		3.2E+01			3.2E+01	5.4E-04		5.4E-04
B60	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	3.31E-02		3.2E+01			3.2E+01	1.1E-03		1.1E-03
B60	VOC	Xylenes (total)	1330-20-7	ID	5.37E-02		5.0E+01			5.0E+01	1.1E-03		1.1E-03
B60	SVOC	Naphthalene	91-20-3	C	1.39E-02	4.2E-02	1.6E+00			4.2E-02	3.3E-01	**3.3E-07**	9.0E-03
B61	VOC	p-Cymene	99-87-6	ID	3.60E-02								
B61	VOC	Tetrachloroethene	127-18-4	LC	1.30E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	5.7E-02	5.7E-08	6.2E-04
B61	VOC	Toluene	108-88-3	ID	1.90E-02		2.6E+03		1.6E+02	1.6E+02	1.2E-04		1.2E-04
B61	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.00E-02		3.2E+01			3.2E+01	3.2E-04		3.2E-04
B62	VOC	Benzene	71-43-2	A	1.70E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	3.5E-01	**3.5E-07**	1.1E-02
B62	VOC	n-Butylbenzene	104-51-8	ID	2.90E-02				1.1E+02	1.1E+02	2.8E-04		2.8E-04
B62	VOC	sec-Butylbenzene	135-98-8		9.00E-03				2.1E+02	2.1E+02	4.3E-05		4.3E-05
B62	VOC	p-Cymene	99-87-6	ID	1.80E-02								
B62	VOC	1,2-Dichloroethane	107-06-2	B2	7.60E-02	5.5E-02	3.7E+00			5.5E-02	**1.4E+00**	**1.4E-06**	2.1E-02
B62	VOC	Toluene	108-88-3	ID	4.80E-02		2.6E+03		1.6E+02	1.6E+02	3.1E-04		3.1E-04
B62	VOC	Xylenes (total)	1330-20-7	ID	2.50E-02		5.0E+01			5.0E+01	5.0E-04		5.0E-04
B63	VOC	Acetone	67-64-1	ID	4.70E-02		1.6E+04			1.6E+04	2.9E-06		2.9E-06
B63	VOC	Benzene	71-43-2	A	3.70E-03	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	7.6E-02	7.6E-08	2.4E-03
B63	VOC	Bromodichloromethane	75-27-4	B2	4.60E-03	3.8E-02		3.8E-02	4.2E+01	3.8E-02	1.2E-01	1.2E-07	1.1E-04
B63	VOC	Bromoform	75-25-2	B2	3.47E-03	1.3E+00		1.3E+00	4.2E+01	1.3E+00	2.7E-03	2.7E-09	8.4E-05
B63	VOC	2-Butanone	78-93-3	ID	1.19E-02		2.6E+03			2.6E+03	4.6E-06		4.6E-06
B63	VOC	Chloroform	67-66-3	B2	1.07E-02	6.0E-02	5.0E+01			6.0E-02	1.8E-01	**1.8E-07**	2.1E-04
B63	VOC	Cumene	98-82-8	D	5.90E-03		2.1E+02			2.1E+02	2.8E-05		2.8E-05
B63	VOC	Dibromochloromethane	124-48-1	C	1.10E-02			6.5E-02	4.2E+01	6.5E-02	1.7E-01	**1.7E-07**	2.7E-04
B63	VOC	Dichlorodifluoromethane	75-71-8	ID	3.50E-03		5.0E+01			5.0E+01	7.0E-05		7.0E-05
B63	VOC	Ethanol	64-17-5		1.50E-01								
B63	VOC	Acetic acid, ethyl ester	141-78-6		1.24E-02		3.7E+01			3.7E+01	3.4E-04		3.4E-04
B63	VOC	Ethyl Benzene	100-41-4	D	3.43E-03	5.5E-01	5.0E+02			5.5E-01	6.2E-03	6.2E-09	6.9E-06
B63	VOC	4-Ethyltoluene	622-96-8		6.00E-03								
B63	VOC	2-Hexanone	591-78-6	ID	3.70E-03		1.6E+01			1.6E+01	2.4E-04		2.4E-04
B63	VOC	Isopropanol	67-63-0	ID	3.90E-03		1.1E+02			1.1E+02	3.7E-05		3.7E-05
B63	VOC	4-Methyl-2-pentanone	108-10-1	ID	4.70E-03		1.6E+03			1.6E+03	3.0E-06		3.0E-06
B63	VOC	n-Propylbenzene	103-65-1	ID	3.55E-02		5.0E+02			5.0E+02	7.1E-05		7.1E-05
B63	VOC	Tetrachloroethene	127-18-4	LC	1.60E-02	5.5E+00	2.1E+01	2.3E-01	2.1E+01	2.3E-01	7.0E-02	7.0E-08	7.6E-04
B63	VOC	Tetrahydrofuran	109-99-9	SC	2.60E-03		1.1E+03			1.1E+03	2.5E-06		2.5E-06
B63	VOC	Toluene	108-88-3	ID	1.30E-02		2.6E+03		1.6E+02	1.6E+02	8.4E-05		8.4E-05
B63	VOC	1,2,3-Trichlorobenzene	87-61-6	ID	9.00E-03				1.7E+00	1.7E+00	5.5E-03		5.5E-03
B63	VOC	1,2,4-Trichlorobenzene	120-82-1	LC	8.00E-03		1.1E+00	1.9E-01	1.1E+00	1.9E-01	4.2E-02	4.2E-08	7.6E-03
B63	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	8.30E-03		3.2E+01			3.2E+01	2.6E-04		2.6E-04
B63	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	3.77E-03		3.2E+01			3.2E+01	1.2E-04		1.2E-04
B63	VOC	Xylenes (total)	1330-20-7	ID	1.18E-02		5.0E+01			5.0E+01	2.4E-04		2.4E-04
B63	SVOC	Naphthalene	91-20-3	C	1.47E-02	4.2E-02	1.6E+00			4.2E-02	3.5E-01	**3.5E-07**	9.5E-03
B64	VOC	Benzene	71-43-2	A	1.90E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	3.9E-01	**3.9E-07**	1.2E-02
B64	VOC	n-Butylbenzene	104-51-8	ID	4.40E-02				1.1E+02	1.1E+02	4.2E-04		4.2E-04

Table H-3
Screening Results and Single-Chemical Cancer Risk and Noncancer HQ
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Chem Group	Chemical	CASRN	Carc Class	Max Detect from All Depths (mg/m^3)	Residential Carc RSL (mg/m^3)	Residential NonCarc RSL (mg/m^3)	DTSC Residential Soil Gas Screening Level Cancer (mg/m^3)	DTSC Residential Soil Gas Screening Level Noncancer (mg/m^3)	Residential Soil Gas Screening Level (mg/m^3)	Ratio of Max Detect to Residential Soil Gas Screening Level	Residential Cancer Risk	Residential HQ
B64	VOC	Chloroform	67-66-3	B2	1.30E-02	6.0E-02	5.0E+01			6.0E-02	2.2E-01	**2.2E-07**	2.6E-04
B64	VOC	p-Cymene	99-87-6	ID	1.70E-02								
B64	VOC	Ethyl Benzene	100-41-4	D	1.18E-01	5.5E-01	5.0E+02			5.5E-01	2.1E-01	**2.1E-07**	2.4E-04
B64	VOC	n-Propylbenzene	103-65-1	ID	4.40E-02		5.0E+02			5.0E+02	8.8E-05		8.8E-05
B64	VOC	Toluene	108-88-3	ID	3.11E-01		2.6E+03		1.6E+02	1.6E+02	2.0E-03		2.0E-03
B64	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	2.28E-01		3.2E+01			3.2E+01	7.2E-03		7.2E-03
B64	VOC	1,3,5-Trimethylbenzene	108-67-8	ID	1.39E-01		3.2E+01			3.2E+01	4.4E-03		4.4E-03
B64	VOC	Xylenes (total)	1330-20-7	ID	6.39E-01		5.0E+01			5.0E+01	1.3E-02		1.3E-02
B65	VOC	Benzene	71-43-2	A	1.20E-02	1.8E-01	1.6E+01	4.9E-02	1.6E+00	4.9E-02	2.5E-01	**2.5E-07**	7.7E-03
B65	VOC	sec-Butylbenzene	135-98-8		3.55E-02				2.1E+02	2.1E+02	1.7E-04		1.7E-04
B65	VOC	tert-Butylbenzene	98-06-6		5.05E-02				2.1E+02	2.1E+02	2.4E-04		2.4E-04
B65	VOC	Chloroform	67-66-3	B2	1.00E-02	6.0E-02	5.0E+01			6.0E-02	1.7E-01	**1.7E-07**	2.0E-04
B65	VOC	p-Cymene	99-87-6	ID	5.33E-01								
B65	VOC	Dibromochloromethane	124-48-1	C	1.10E-02			6.5E-02	4.2E+01	6.5E-02	1.7E-01	**1.7E-07**	2.7E-04
B65	VOC	Toluene	108-88-3	ID	3.70E-02		2.6E+03		1.6E+02	1.6E+02	2.4E-04		2.4E-04
B65	VOC	1,2,4-Trimethylbenzene	95-63-6	ID	1.40E-02		3.2E+01			3.2E+01	4.4E-04		4.4E-04
B65	VOC	Xylenes (total)	1330-20-7	ID	2.60E-02		5.0E+01			5.0E+01	5.2E-04		5.2E-04

Notes:
Only chemicals detected at each location are shown.
Exposure concentrations conservatively calculated using the maximum detected soil gas concentrations observed at each location, regardless of depth.
The screening levels for soil are the lower of the screening levels at either the target cancer risk of 1E-6 or target hazard quotient of 1.
Ratios of concentration to the screening level greater than 1 are shaded in bold.
Chemical-specific risks are scaled off of the cancer-based indoor air screening levels, attenuated by the attenuation factor 0.002. Chemical-specific risks above $1x10^{-7}$ are shaded in bold.
Chemical-specific risks are scaled off of the noncancer-based soil screening levels, attenuated by the attenuation factor 0.002. Chemical-specific HQs above 0.1 are shaded in bold.
The concentrations for the Xylene isomers (m/p and o) were summed to Xylenes (total).
Chem Group - chemical group
Carc Class - USEPA Weight-of-Evidence Cancer Classification

Table H-4
Upper-Bound Cumulative Risks and HI Estimates (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Cancer Risk	HI
AB01	NC	NC
AB02	NC	NC
AB03	NC	NC
AB04	NC	NC
AB05	NC	NC
AB06	NC	NC
AB07	NC	NC
AB08	NC	NC
AB09	NC	NC
B02	5E-08	1E+00
B03	NC	NC
B03A	NC	NC
B03B	NC	NC
B03CC	NC	NC
B04	4E-08	1E+00
B05	4E-08	9E-01
B06	NC	NC
B07	NC	NC
B08	NC	NC
B09	NC	NC
B10	NC	NC
B100	4E-08	1E+00
B101	3E-08	9E-01
B102	1E-06	1E+00
B103	9E-08	1E-03
B104	NC	NC
B105	NC	NC
B106	8E-08	1E-03
B107	NC	NC
B108	6E-07	1E-02
B109	2E-07	2E-03
B10A	NC	NC
B10B	NC	NC
B10C	NC	NC
B117	4E-09	1E-04
B118	2E-09	5E-05
B119	3E-09	9E-05
B11A	NC	NC
B11BB	NC	NC
B11D	NC	NC
B11DDD	5E-09	1E-04
B12	NC	NC
B120	2E-09	6E-05
B121	4E-09	7E-05
B12AA	NC	NC
B12CC	NC	NC
B13	NC	NC
B14	NC	NC
B15	NC	NC
B16	NC	NC
B17	NC	NC
B18A	NC	NC
B18B	NC	NC
B18C	NC	NC
B18D	NC	NC
B19	9E-09	4E-04
B20	NC	NC
B20A	NC	NC
B20C	NC	NC

Table H-4
Upper-Bound Cumulative Risks and HI Estimates (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Cancer Risk	HI
B20D	NC	NC
B21	NC	NC
B25	NC	NC
B25A	NC	NC
B25BB	NC	NC
B25DD	NC	NC
B26	NC	NC
B27	NC	NC
B28	NC	NC
B29	NC	NC
B30	NC	NC
B31	NC	NC
B32	NC	NC
B41	2E-08	5E-03
B42	NC	NC
B43	NC	NC
B44	NC	NC
B45	2E-08	6E-01
B46	4E-08	1E+00
B47	NC	NC
B48	NC	NC
B49	NC	NC
B50	NC	NC
B51	NC	NC
B52	NC	NC
B53	6E-08	1E+00
B53A	4E-08	7E-01
B53B	5E-08	9E-01
B53C	4E-08	8E-01
B53D	4E-08	8E-01
B55	4E-08	1E+00
B56	4E-08	1E+00
B57A	5E-08	8E-01
B57B	4E-08	8E-01
B57C	4E-08	7E-01
B57D	3E-08	6E-01
B60	3E-08	8E-01
B61	5E-08	1E+00
B61A	4E-08	7E-01
B61B	3E-08	5E-01
B62	4E-08	1E+00
B63	3E-08	1E+00
B64	3E-08	6E-01
B65	5E-08	1E+00
B66	NC	NC
B67	NC	NC
B68	NC	NC
B69	7E-09	6E-04
B70A	3E-08	7E-01
B70BB	NC	NC
B71	NC	NC
B72	NC	NC
B73	NC	NC
B74	NC	NC
B79	NC	NC
B80	NC	NC
B81	NC	NC
B82	NC	NC
B83	1E-08	5E-04

Table H-4
Upper-Bound Cumulative Risks and HI Estimates (Post-Remedy)
Direct Contact with Soil
Alexander Hamilton High School, Los Angeles, CA

Location	Cancer Risk	HI
B83A	NC	NC
B83B	NC	NC
B83C	NC	NC
B83D	NC	NC
B84	NC	NC
B85	4E-09	1E-04
B86	4E-09	1E-04
B90	1E-07	2E-02
B91	NC	NC
B91A	NC	NC
B91BB	NC	NC
B91C	NC	NC
B92	6E-09	5E-04
B93	6E-08	5E-03
B94	NC	NC
B95	NC	NC
B96	NC	NC
B97	NC	NC
B98	3E-07	1E+00
B99	3E-07	1E+00

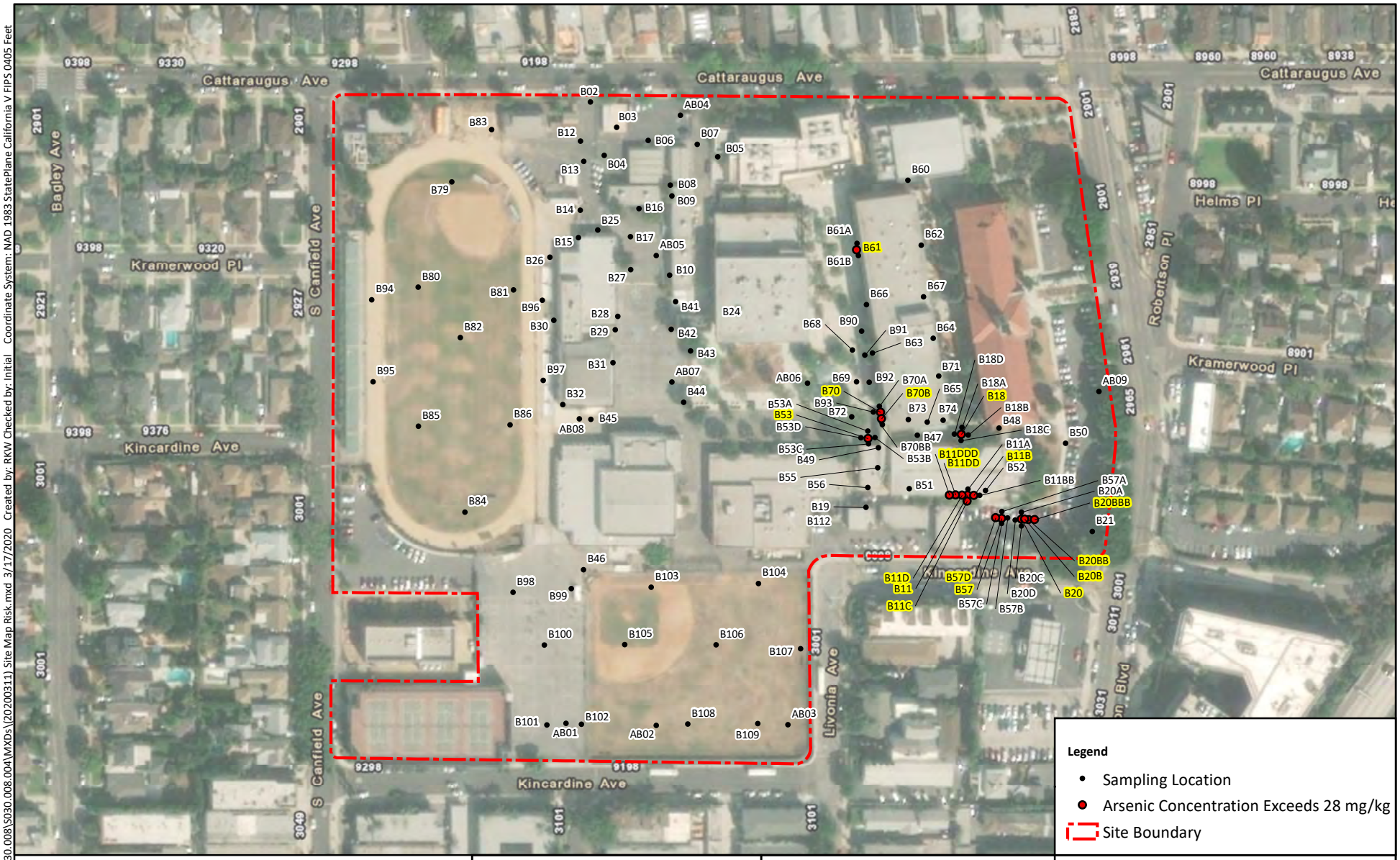
Notes:
Cumulative cancer risk and HI estimates in excess of 1E-6 and 1, respectively, are shaded and bold.
NC - Risk and HI estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect

Table H-5
Upper-Bound Cumulative Risks and HI Estimates
Vapor Intrusion from Soil Gas
Alexander Hamilton High School, Los Angeles, CA

Location	Risk	HI
B01	4E-07	2E-03
B02	5E-07	1E-02
B04	**2E-06**	2E-02
B04A	8E-08	2E-03
B04B	NC	NC
B04C	7E-08	3E-03
B04D	2E-07	5E-03
B05	5E-08	8E-04
B110	**6E-06**	2E-01
B111	4E-07	1E-02
B112	1E-06	4E-02
B113	1E-06	3E-01
B114	5E-07	5E-01
B115	**2E-06**	4E-01
B116	5E-07	2E-01
B117	**6E-06**	4E-01
B118	2E-07	2E-03
B119	5E-07	1E-02
B11DDD	3E-07	8E-03
B120	3E-07	1E-02
B121	**8E-06**	2E-01
B22	5E-07	3E-03
B23	4E-07	3E-03
B24	2E-07	3E-04
B53	5E-07	1E-02
B54	NC	6E-04
B55	**2E-05**	9E-01
B56	**8E-06**	3E-01
B57	4E-07	1E-02
B58	3E-07	1E-03
B59	1E-06	5E-03
B60	1E-06	9E-02
B61	6E-08	1E-03
B62	**2E-06**	3E-02
B63	1E-06	3E-02
B64	8E-07	4E-02
B65	6E-07	1E-02

Notes:
Cumulative cancer risk and HI estimates in excess of 1E-6 and 1, respectively, are shaded and bold.
NC - Risk and HI estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect.

FIGURES



Legend

- Sampling Location
- Arsenic Concentration Exceeds 28 mg/kg
- Site Boundary

N

0 100 200 300 400 Feet

1 inch = 200 feet

SAFETY FIRST

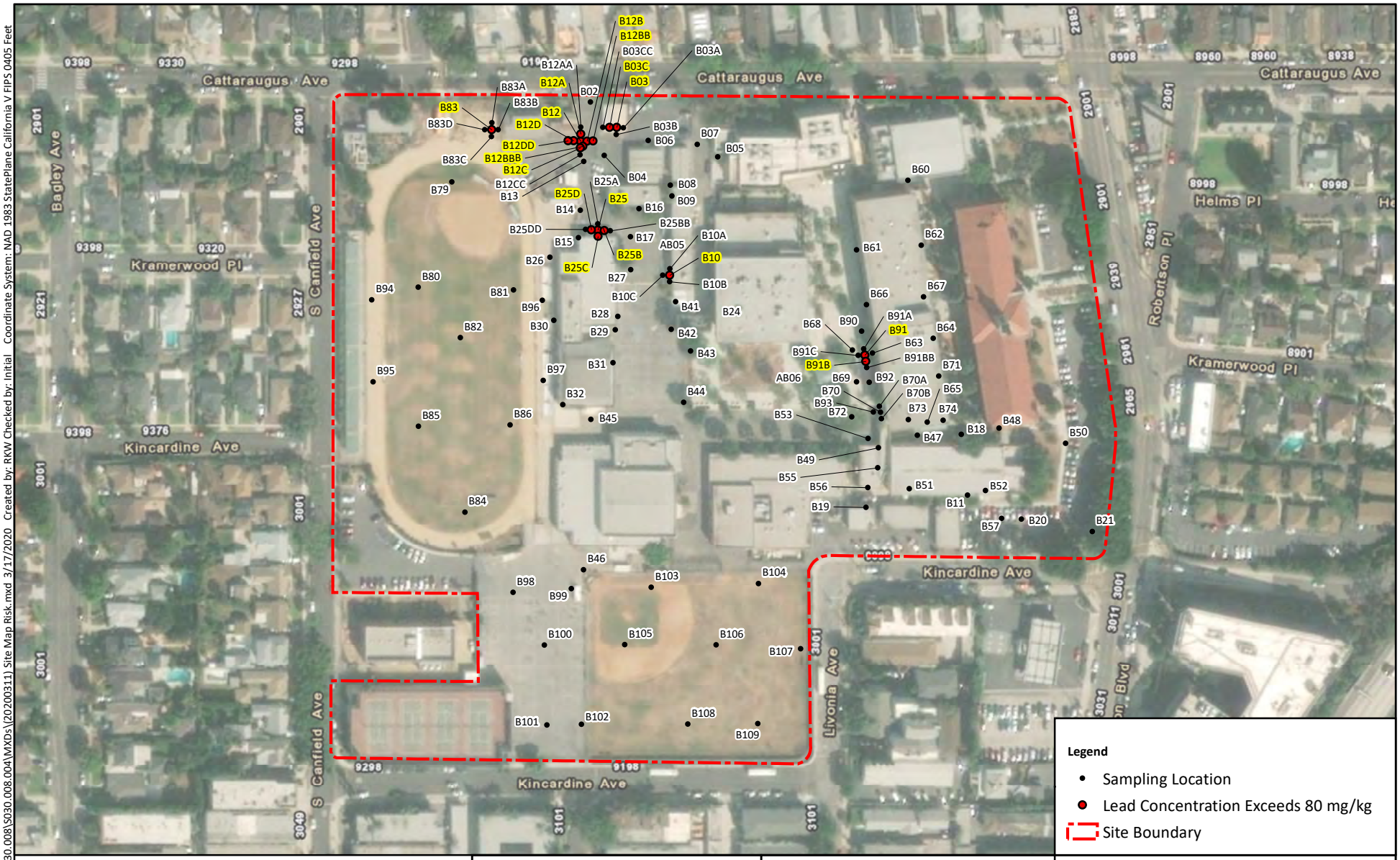
terraphase engineering

CLIENT:	LAUSD
PROJECT:	Alexander Hamilton Senior HS
PROJECT NUMBER:	S030.008.004

Arsenic Exceedance Locations

FIGURE 1

File: N:\GIS\Pr\S030 LAUSD\S030.008\S030.008.004\MXDs\(20200311) Site Map Risk.mxd 3/17/2020 Created by: RKW Checked by: Initial Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet



N

0 100 200 300 400 Feet

1 inch = 200 feet

SAFETY FIRST

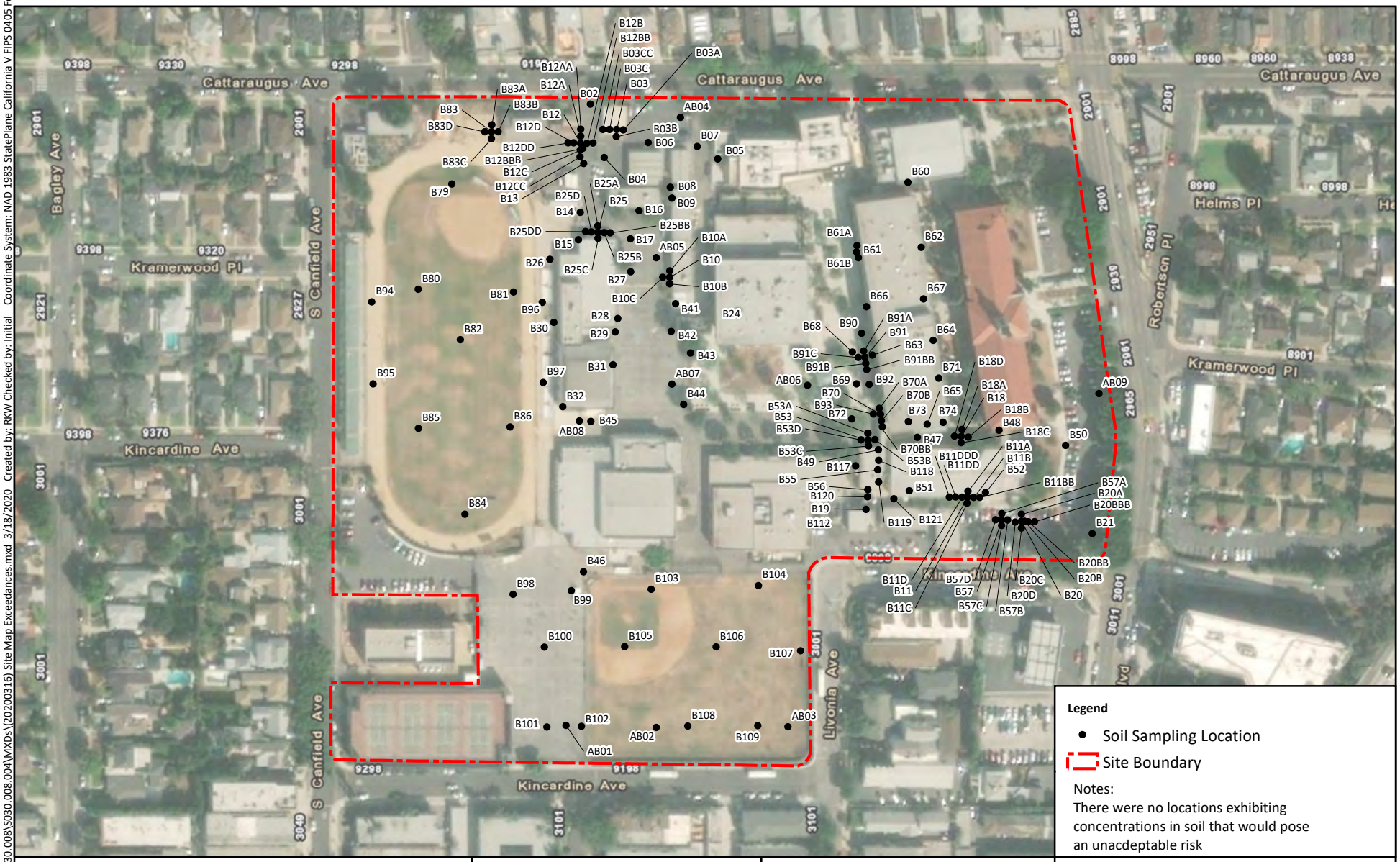
terraphase engineering

CLIENT:	LAUSD
PROJECT:	Alexander Hamilton Senior HS
PROJECT NUMBER:	S030.008.004

Lead Exceedance Locations

FIGURE 2

File: N:\GIS\Pr\S030 LAUSD\S030.008\S030.008.004\MXDs\(20200311) Site Map Risk.mxd 3/17/2020 Created by: RKW Checked by: Initial Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet



Legend

- Soil Sampling Location
- Site Boundary

Notes:
There were no locations exhibiting concentrations in soil that would pose an unacdeptable risk

N

0 100 200 300 400 Feet

1 inch = 200 feet

SAFETY FIRST

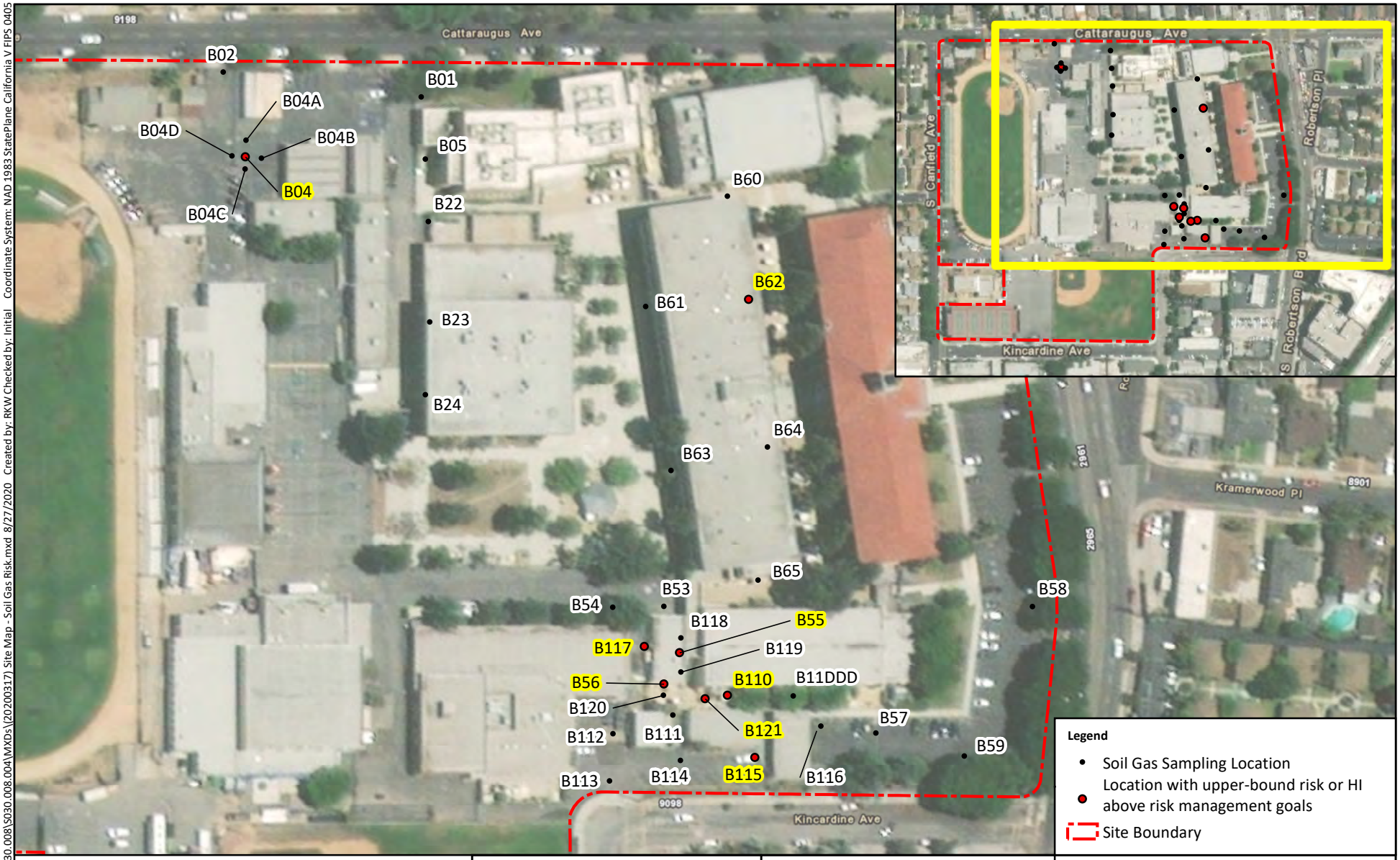
terraphase engineering

CLIENT:	LAUSD
PROJECT:	Alexander Hamilton Senior HS
PROJECT NUMBER:	S030.008.004

Risk Assessment Results (Soil)

FIGURE 3

File: N:\GIS\Pr\S030 LAUSD\S030.008\S030.008.004\MXDs\(20200316) Site Map Exceedances.mxd 3/18/2020 Created by: RKW Checked by: Initial Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet



N

0 60 120 180 240 Feet

1 inch = 126 feet

SAFETY FIRST

terraphase engineering

CLIENT:	LAUSD
PROJECT:	Alexander Hamilton Senior HS
PROJECT NUMBER:	S030.008.004

Risk Assessment Results (Soil Gas)

FIGURE 4

File: N:\GIS\Pr\S030_LAUSD\S030.008\S030.008.004\MXDs\(20200317) Site Map - Soil Gas Risk.mxd 8/27/2020 Created by: RKW Checked by: Initial Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet