SUPPLEMENTAL PRELIMINARY ENDANGERMENT ASSESSMENT – EQUIVALENT REPORT

RESEDA HIGH SCHOOL COMPREHENSIVE MODERNIZATION PROJECT 18230 KITTRIDGE STREET RESEDA, CALIFORNIA 91335



Prepared for

Los Angeles Unified School District Office of Environmental Health and Safety 333 South Beaudry Avenue, 21st Floor Los Angeles, California 90017

February 15, 2019

Prepared by

PARSONS 100 WEST WALNUT STREET • PASADENA • CALIFORNIA 91124

SUPPLEMENTAL PRELIMINARY ENDANGERMENT ASSESSMENT -**EQUIVALENT REPORT RESEDA HIGH SCHOOL** 18230 KITTRIDGE STREET RESEDA, CALIFORNIA 91335

Prepared for

Los Angeles Unified School District Office of Environmental Health and Safety 333 South Beaudry Avenue, 21st Floor Los Angeles, California 90017

February 15, 2019

Prepared by

PARSONS 100 WEST WALNUT STREET • PASADENA • CALIFORNIA 91124

PETER B. SHAIF

Prepared by:

Justin King

Project Manager

Date: 2-15-19

Reviewed by:

Peter Shair, P.G.

Project Geologist

Date: 2-15-19

TABLE OF CONTENTS

Execu	tive Summary	V
1.0	Introduction	1
2.0	Sampling Activities	1
2.1	Sampling Strategy	2
2.2	Preliminary Screening Levels	2
2.3	Pre-Field Activities	3
2.4	Field Activities	3
2.5	Equipment Decontamination	7
2.6	Investigative Derived Waste	7
2.7	Building Inventory	8
3.0	Results	9
3.1	Introduction	9
3.2	Soil Analytical Results	9
3.3	Soil Vapor Sampling Results	10
3.4	Delineation of Impacts in Soil	12
3.5	Delineation of Impacts in Soil Vapor	12
4.0	Field Variances	14
5.0	Human Health Screening Evaluation	15
5.1	Soils	15
5.2	Soil Vapor/Sub-Slab Soil Vapor/Indoor Air	15
6.0	Conclusions and Recommendations	17
6.1	Conclusions	17
6.2	Recommendations	18
7.0	References	19

TABLES

Table 1	ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL
TABLE 2	ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL
TABLE 3	ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN SOIL
Table 4	SOIL VAPOR PROBE SAMPLING ANALYTICAL RESULTS
Table 5	SUB-SLAB VAPOR PIN SAMPLING ANALYTICAL RESULTS
TABLE 6	Indoor/Outdoor Air Analytical Results
	FIGURES

Figure 1	SITE LOCATION MAP
Figure 2	BUILDING LOCATIONS
FIGURE 3	SOIL VAPOR AND SUB-SLAB SAMPLING LOCATIONS
Figure 4	INDOOR/OUTDOOR AIR AND SUB-SLAB SAMPLING LOCATIONS
Figure 5	TETRACHLOROETHENE IN SOIL VAPOR AT 5 FT BGS
Figure 6	TETRACHLOROETHENE IN SOIL VAPOR AT 15 FT BGS

APPENDICES

APPENDIX A	BORING LOGS
APPENDIX B	WIND DIRECTIONS
APPENDIX C	Waste Manifests
APPENDIX D	BUILDING INVENTORY
APPENDIX E	SOIL ANALYTICAL LABORATORY REPORTS
APPENDIX F	SOIL VAPOR AND INDOOR / OUTDOOR ANALYTICAL LABORATORY REPORTS

ACRONYMS

AOCs Areas of Concern bgs below ground surface

BESI Belshire Environmental Services, Inc.
CMP Comprehensive Modernization Project

cc/min cubic centimeters per minute

CoC Chain of Custody
COC Chemical of Concern
DRO diesel-range organics

DTSC Department of Toxic Substances Control

ELAP Environmental Laboratory Accreditation Program
EPA United States Environmental Protection Agency

GRO gasoline-range organics

HHRA Human Health Risk Assessment
HHSE Human Health Screening Evaluation
HVAC heating, ventilation and air conditioning

ft feet

IDW investigation-derived waste

LAUSD Los Angeles Unified School District

mg/kg milligrams per kilogram mL/min milliliters per minute ORO oil-range organics

PCBs Polychlorinated biphenyls

PCE tetrachloroethene

PEA-E Preliminary Endangerment Assessment – Equivalent

PID Photoionization Detector
PSL Preliminary Screening Level
QA/QC quality assurance/quality control
RAW Removal Action Workplan

RECs Recognized Environmental Conditions

Report Preliminary Endangerment Assessment – Equivalent Report

RSL USEPA Regional Screening Level

SFBRWQCB San Francisco Bay Regional Water Quality Control Board

Site Reseda High School SL Screening Level

TPH Total Petroleum Hydrocarbons

USEPA United States Environmental Protection Agency

μg/m³ micrograms per cubic meter VOCs volatile organic compounds

EXECUTIVE SUMMARY

This document presents the results of a *Supplemental Preliminary Endangerment Assessment – Equivalent* (PEA-E) *Report* (Report) conducted for Los Angeles Unified School District's (LAUSD) Reseda High School (Site) in support of a Comprehensive Modernization Project (CMP). This Report presents a summary of Supplemental PEA-E activities, which includes several sampling and analyses events, performed in support of the proposed CMP on the school campus, located at 18230 Kittridge Street, Reseda, California (**Figure 1**).

Initial PEA-E activities were conducted between December 2017 and May 2018 to assess environmental conditions at selected areas within the CMP footprint prior to LAUSD's proposed demolition, modernization and construction activities. The Site background and environmental setting details are presented in the initial PEA-E Report (Parsons 2018a). The Supplemental PEA-E activities were conducted between September 2018 and January 2019 to further delineate soil vapor impacts in and around the Industrial Arts Building (**Figure 2**). The Supplemental PEA-E was conducted per the Draft Indoor Air Sampling Workplan (Parsons, 2018b) that was verbally approved by LAUSD on October 8, 2018. Various additional sampling activities described in this document were requested by LAUSD as the work progressed.

The following conclusions were derived from the supplemental investigation conducted at Reseda High School for soil, soil vapor and indoor air. Previous recommendations regarding the presence of lead and arsenic in soil above their respective PSLs are documented in the PEA-E Report (Parsons, 2018a).

Soil

 Soil was sampled for PCBs, TPH, and VOCs during the supplemental investigation in AOC4. There were no detections above the PSLs, which is consistent with the original investigation results (Parsons, 2018a). Therefore, PCBs, TPH, and VOCs are not considered COCs in soil.

Soil Vapor

• A total of 41 soil vapor samples, including duplicates, were collected from selected soil vapor probes during the supplemental investigation on September 5 and 19, October 9, 2018 and January 3, 2019 to further characterize soil vapor concentrations in AOC4. Select probes were sampled in multiple events to provide additional data for decision-making purposes. LAUSD Office of Environmental Health and Safety (OEHS) requested that the analytical data now be compared against the DTSC's future PSLs. PCE was detected above the future PSL (15 μg/m³) at 31 sample (either 5 or 15 ft bgs) locations. In the 41 vapor samples, PCE concentrations ranged from 1.7 μg/m³ (AOC4-SV17-5) to 1,440 μg/m³ (AOC4-SV10-5). The future PSL for naphthalene is 2.8 μg/m³. Naphthalene exceeded the future PSL concentration in five of the 41 samples, ranging from 3.0 μg/m³ (AOC4-SV16-

- 5) to 774 $\mu g/m^3$ (AOC4-SV8-15). 1,2,4-trimethylbenzene exceeded the future PSL concentration (2,100 $\mu g/m^3$) in one (AOC4-SV8-15) of the 41 samples, at 2,440 $\mu g/m^3$. Benzene exceeded the future PSL concentration (3.2 $\mu g/m^3$) in one (AOC4-SV8-15) of the 41 samples, at 7 $\mu g/m^3$. Note that for benzene and naphthalene the non-detect values reported by the laboratory are the method detection limits; some of which exceed the future PSLs. No other VOCs were detected above their respective PSLs.
- Based on the multiple soil vapor sampling events from previously installed and more recently installed soil vapor probes, vapor-phase VOCs are considered laterally delineated but not vertically delineated (**Figure 5 and Figure 6**). VOCs, including PCE (the most prevalent compound of concern), was detected above the future PSLs in soil vapor at 5-and 15-ft bgs at probe locations in many of the previously installed soil vapor probe locations (AOC4-SV1 through AOC4-SV13) and in the soil vapor probe locations AOC4-SV13 through AOC4-SV15 installed for the supplemental investigation.
- Several soil vapor probes had reported concentrations of naphthalene and 1,2,4-trimethylbenzene above their respective future PSL. As discussed in Section 3.5, these two compounds have not been observed in any of the other soil vapor probes sampled during multiple events during the initial and supplemental scope of work. Given the sporadic and isolated nature of these detections they are not considered Site COCs.
- On September 15 and 19, 2018, 12 sub-slab vapor pins were sampled for soil vapor. PCE concentrations in the sub-slab vapor pins sampled on September 15 and 19, 2018 ranged from 18 μg/m³ (AOC4-SS10) to 1,300 μg/m³ (AOC4-SS-3). Based on PCE concentrations exceeding the sub-slab PSLs, indoor and outdoor air sampling was conducted to further assess vapor intrusion potential to indoor air.
- Benzene was detected at concentrations above the future PSLs at various soil vapor probes and sub-slab probes during the initial investigation (May 2018 event). Subsequent sampling of these and additional probes conducted during the supplemental investigation did not confirm the continued presence of benzene in soil vapor probes and sub-slab probes. Based on the benzene detections during the initial investigation it is considered a Site COC.

Indoor Air

During the supplemental investigation, three indoor and outdoor air sampling events were conducted using Summa canisters. For each event, three outdoor air samples and four indoor air samples were collected. These samples were collected concurrent with selected sub-slab vapor pins to help interpret the origin of any indoor air VOC detections.

• PCE was not detected above the residential PSL (0.46 μg/m³) in any of the 23 indoor, outdoor, or underground utility tunnel air samples collected on any of the three sample dates. Low concentrations of PCE were detected with the HVAC system on and with it off. Thus, even under worst-case conditions (i.e., HVAC off, which reduces the dilution of indoor air with outdoor air), exposures to PCE in indoor air result in a residential risk

- estimate less than 1×10^{-6} and noncancer hazard quotient less than one, which is acceptable. Although PCE concentrations are below the PSL in indoor air, the sub-slab concentrations are high enough that there is still a potential for concern if the existing building is replaced by a new building.
- As discussed in Section 5.2, benzene in soil vapor and sub-slab soil vapor at the Site does exceed the future PSLs, but the concentrations of benzene in indoor air and outdoor air appear to be relatively similar, indicating that benzene does not represent a potential vapor intrusion issue.

Recommendations

The following are recommendations based on the above conclusions:

• A Removal Action Workplan (RAW) should be developed for the Site to address PCE and benzene soil vapor impacts above the future PSLs, as well as to address previously identified (Parsons, 2018a) shallow soils impacted with lead and/or arsenic above their PSLs.

1.0 Introduction

This document presents the results of a Supplemental Preliminary Endangerment Assessment – Equivalent (PEA-E) Report (Report) conducted for Los Angeles Unified School District's (LAUSD) Reseda High School (Site) in support of a Comprehensive Modernization Project (CMP). This Report presents a summary of Supplemental PEA-E activities, which includes several sampling and analyses events, performed in support of the proposed CMP on the school campus, located at 18230 Kittridge Street, Reseda, California (Figure 1).

Initial PEA-E activities were conducted between December 2017 and May 2018 to assess environmental conditions at selected areas within the CMP footprint prior to LAUSD's proposed demolition, modernization and construction activities. The Site background and environmental setting details are presented in the initial PEA-E Report (Parsons 2018a). The Supplemental PEA-E activities were conducted between September and January 2019 to further delineate soil vapor impacts in and around the Industrial Arts Building (**Figure 2**). The Supplemental PEA-E was conducted per the Draft Indoor Air Sampling Workplan (Parsons, 2018b) that was verbally approved by LAUSD on October 8, 2018. Various additional sampling activities described in this document were requested by LAUSD as the work progressed. The work was conducted in accordance with applicable regulatory including the *Preliminary Environmental Assessment Guidance Manual* (DTSC, 2015a) prepared by the California Department of Toxic Substances Control (DTSC). A human health screening evaluation (HHSE) was conducted for the Site based on the soil and soil vapor analytical data generated during the supplemental field investigation.

2.0 SAMPLING ACTIVITIES

The following sections describe the Supplemental PEA-E activities performed, including sampling strategy, methods and procedures, sample handling, decontamination procedures, and management of investigation-derived waste (IDW) for the field investigation. Soil sampling and soil vapor probe installation was conducted on September 10 and October 6, 2018. Soil vapor sampling was conducted on September 15 and 19 and October 9, 2018, and January 3, 2019. Indoor and outdoor air sampling with concurrent sub-slab soil vapor sampling was conducted on October 5 and 6, 2018, and January 3, 2019.

Site access and fieldwork notifications to school administrative personnel were coordinated with the LAUSD-OEHS Project Manager, the LAUSD Complex Project Manager, and the Reseda High School Plant Manager. The following subcontractors supported the fieldwork: Pacific Coast Locators (subsurface utility clearance), Rice General (concrete coring and hand augering), Gregg Drilling (direct push soil sampling and soil vapor probe installation), TestAmerica Laboratories, Inc. (soil sample analysis), Jones Environmental (soil vapor sample collection/analysis), and Belshire Environmental Services, Inc. (IDW transport and disposal).

2.1 SAMPLING STRATEGY

The supplemental PEA-E field program consisted of soil and soil vapor sampling to further investigate the recommended environmental conditions (RECs) in and around Area of Concern 4 (AOC4), which is the Industrial Arts buildings in the central portion of the school campus. Thirteen soil vapor probes (AOC4-SV1 and AOC4-SV13) were previously installed and sampled during the PEA-E field investigation (Parsons, 2018a). Soil vapor probes AOC4-SV14 through AOA4-SV17 were subsequently installed and sampled to further delineate volatile organic compounds (VOCs) in soil gas. Twelve sub-slab soil vapor pins were also installed and sampled in the four Industrial Arts building classrooms to evaluate VOCs immediately beneath the foundation slabs. The sample locations, depths, analytical parameters, and sample location rationale were approved by LAUSD. Soil vapor and sub-slab soil vapor locations are shown on **Figures 3.**

Based on the results of the soil vapor and sub-slab soil vapor samples, indoor air samples were collected to determine if there is a complete vapor intrusion pathway and a potential human health risk associated with the Industrial Arts Building in Rooms IA4, IA5A, IA5B, and IA6. Outdoor air samples and sub-slab soil vapor samples (at select locations) were collected concurrently with indoor air samples. Indoor and outdoor air sample locations are shown on **Figure 4**.

2.2 Preliminary Screening Levels

Analytical results for the soil, soil vapor, sub-slab soil vapor, and outdoor air samples were compared with risk-based screening levels to determine if the analytes are present at the Site at concentrations that may represent a potential health risk. The derivation of the screening levels used for the various chemical constituents is described in the following sub-sections. The screening levels are referred to here and after as PSLs (preliminary screening levels). Note that in the initial PEA-E Report (Parsons 2018a), the current (as of 2018) PSLs were used to compare the data generated during the initial PEA activities. Based on LAUSD's subsequent request, the soil vapor and sub-slab soil vapor data generated during the Supplemental PEA-E activities are compared against the screening levels generated using the USEPA (2015) attenuation factors, as recommended in DTSC's draft vapor intrusion guidance (Haley and Aldrich, 2018).

2.2.1 Preliminary Screening Levels for Soil

For direct exposures to soils, DTSC's (2015a) *Preliminary Endangerment Assessment Manual* states that the risk-based screening levels that should be used are the "the USEPA Regional Screening Level (RSL) for residential land use, modified as necessary by the DTSC in Human Health Risk Assessment (HHRA) Note 3." Thus, the PSLs for soil used here are, in general, the USEPA (2018) RSLs unless DTSC (2018) has published a screening value, termed the DTSC-SL. Chemicals with special considerations are discussed in more detail below.

Petroleum hydrocarbons: Neither DTSC (2018) nor USEPA (2018) provide risk-based screening levels for petroleum hydrocarbons as measured by USEPA 8015. Instead, DTSC (2015)

recommends that the risk-based screening levels derived by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB, 2019) for direct contact be used.

2.2.2 Screening Levels for Soil Vapor and Sub-Slab Soil Vapor

Soil vapor screening levels were based on the USEPA (2018) residential RSLs for air, as modified by the DTSC (2018) residential screening levels (SLs) for air. However, these screening levels are for indoor and/or ambient air. To convert them to soil vapor and sub-slab soil vapor screening levels, the indoor air screening levels are divided by an attenuation factor. Both DTSC (2011) and USEPA (2015) recommend different attenuation factors. However, DTSC has incorporated the USEPA (2015) attenuation factors into their draft vapor intrusion guidance (Haley and Aldrich, 2018). As that guidance has not yet been released, soil vapor and sub-slab soil vapor PSLs were derived using both the DTSC (2011) attenuation factors (called the "current PSLs") and the USEPA (2015) attenuation factors (called the "future PSLs").

2.2.3 Screening Levels for Indoor Air

Indoor air screening levels were taken from the USEPA (2018) residential RSLs for air, as modified by the DTSC (2018) residential SLs for air.

2.3 PRE-FIELD ACTIVITIES

Soil boring locations were pre-marked with white paint and Underground Service Alert of Southern California (DigAlert) was notified (on September 4 and October 3, 2018) of the proposed boring locations prior to initiating boring activities. DigAlert contacted the utility owners of record within the Site vicinity and notified them of the planned subsurface investigation. The utility owners of record, or their designated agents, clearly marked the position of their utilities on the ground surface on the public right-of-way sidewalks and street adjacent to the area designated for investigation, up to the school property line. LAUSD provided several available as-built plans depicting locations of subsurface structures and utilities which were also reviewed prior to marking the boring locations.

The proposed excavation areas were surveyed by Pacific Coast Locators, a private utility locator, for the presence of underground utilities using geophysical methods (including ground-penetrating radar, electromagnetic utility locating, and deep search metal detector). Based on the presence of subsurface utilities identified in several locations, each affected boring location was relocated slightly or cancelled, to avoid causing damage to the utility.

2.4 FIELD ACTIVITIES

The following work was completed in AOC4:

On September 10, 2018 soil vapor probes AOC4-SV14 and AOC4-SV15 were installed at 5 and 15 feet (ft) below ground surface (bgs), and sub-slab probes AOC4-SS-4 through AOC4-SS-12 were installed inside the Industrial Arts buildings.

On September 15, 2018 soil vapor probes AOC4-SV1, AOC4-SV2, AOC4-SV3, AOC4-SV6, AOC4-SV8 – AOC4-SV11, AOC4-SV15, and sub-slab probes AOC4-SS8 through AOC4-SS12 were sampled.

On September 19, 2018, soil vapor probes AOC4-SV9, AOC4-SV10, AOC4-SV11, AOC4-SV13 and AOC4-SV14 were sampled, and sub-slab probes AOC4-SS1 through AOC4-SS5, and AOC4-SS7 were sampled.

On October 5, 2018, soil vapor probes AOC4-SV16 and AOC4-SV17 were installed (5 and 15 ft bgs), west and north of the Industrial Arts buildings, respectively. Sub-slab probes AOC4-SS3, AOC4-SS5, AOC4-SS7 and AOC4-SS12 were sampled. Indoor air samples IAS-1 through IAS-4 and outdoor air samples OAS-1 through OAS-3, were collected while the heating, ventilation and air conditioning (HVAC) unit was in normal operating mode.

On October 6, 2018 sub-slab probes AOC4-SS3, AOC4-SS5, AOC4-SS7 and AOC4-SS12 were sampled. Indoor air samples IAS-1 through IAS-4 and outdoor air samples OAS-1 through OAS-3, were collected while the HVAC unit was in non-operating (off) mode.

On October 9, 2018, soil vapor probes AOC4-SV16 and AOC4-SV17 were sampled.

On January 3, 2019, the following samples were collected while the HVAC system was in normal operating mode:

- Indoor air samples IAS-1 through IAS-4.
- Outdoor air samples OAS-1 through OAS-3.
- Underground utility tunnel air samples UT-1 and UT-2.
- Sub-slab samples AOC4-SS3, AOC4-SS5 and AOC4-SS7.
- Soil vapor probes AOC4SV5, AOC4-10, AOC4-SV12, AOC4-SV16 and AOC4-SV17.

The following sections provide more detail on the probe installation and sampling activities.

2.4.1 Soil Sample Collection and Probe Construction

During installation of soil vapor probes AOC4-SV14 and AOC4-SV15 on September 10, 2018 and AOC4-SV16 and AOC4-SV17 on October 5, 2018, soil samples were collected at 5 and 15 ft depth intervals. Each soil sample was collected in a manner that minimized disturbance and allowed the sample to retain as much of the original structure as possible. Soil samples were collected directly from the hand auger at each depth interval and placed in a laboratory-provided glass jar and TerraCore sample container. Soil samples were collected in the individual containers, which were placed in individual sealable plastic bags. Each sample container was labeled individually, stored in an ice chest containing ice, and delivered to a certified laboratory with a chain-of-custody form.

Soil vapor probes AOC4-SV14 through AOC4-SV17 were installed as dual-nested probes, using a hand auger. The concrete was cored at boring locations AOC4-SV14 and AOC4-SV15 prior to hand augering. A 6-inch long stainless-steel inlet screen was connected to ½-inch outer diameter

Teflon tubing, which extended from ground surface to approximately 14.5- to 15-ft bgs and 4.5- to 5-ft bgs. The screens were centered within approximately 1 foot of #2/16 sand so that approximately 3 inches of sand extended above and below the screen ends. One foot of dry granular bentonite was placed immediately above each sand interval and then overlain with hydrated granular bentonite. Granular bentonite extended from 14.25- to 5.25-ft bgs, and from 4.25-ft bgs to 1-foot bgs. Near ground surface, the vapor monitoring probe tube ends were placed in a plastic bag and coiled in the top of the borehole. The cores at AOC4-SV14 and AOC4-SV15 were capped with temporary asphalt patch. Boring logs are in **Appendix A**.

Sub-Slab Vapor Pin Construction

Sub-slab soil vapor sampling was conducted by installing a VAPOR PIN® at nine locations (AOC4-SS4 through AOC4-SS12) inside the Industrial Arts buildings. A hammer drill was used to drill a 1½-inch diameter hole into the concrete a minimum of 1¾-inches into the slab. A 5/8-inch diameter hole was drilled through the slab and approximately 1-inch into the underlying soil to form a void. The lower end of the VAPOR PIN® assembly was placed in the hole and the pin was tapped into place using a dead hammer. The VAPOR PIN® was protected using the flushmount cover.

2.4.2 Soil Vapor Sample Collection

The vapor monitoring probes and sub-slab probes were allowed to equilibrate at least 48 hours prior to purging and sampling. The probes were sampled in accordance with *Department of Toxic Substances Control (DTSC) 2015 Advisory – Active Soil Gas Investigations* (DTSC, 2015b). Purge volumes were calculated at each vapor probe using the volume of the soil vapor probe, filter pack, dry bentonite, and the tubing in the purge/sampling train to the purge pump.

Prior to purging and sampling at each soil vapor probe or sub-slab probe, 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 approximately 100 inches of water, sealing the entire system and observing the vacuum for a minimum of 1 minute. A vacuum gauge, connected in parallel to the apparatus, was used to measure the vacuum. The above-ground fittings were adjusted until there was no noticeable change in the vacuum.

The purge and sampling flow rate was approximately 200 cubic centimeters per minute (cc/min), as noted on the laboratory provided analytical reports and chain of custody (CoC) forms. A default of 3 purge volumes was used as recommended by DTSC (2015b) guidance. Purging was completed using a pump except if noted on the CoC. Soil vapor samples were collected in glass gas-tight syringes equipped with Teflon plungers, with the exception of samples collected on October 9, 2018 and January 4, 2019, which were collected in 1-liter Summa canister.

A tracer gas of n-pentane, n-hexane, and n-heptane was used as leak-test compounds to determine if there were surface leaks into the subsurface due to lack of annular space probe seals. The tracer gas was placed at the tubing-surface interface before sampling. The tracer gas was included as a target analyte during the VOC analysis.

Soil vapor samples were analyzed for VOCs by a mobile laboratory using EPA Method 8260, with the exception of soil vapor samples collected from AOC4-SV16 and AOC4-SV17 (October 9, 2018), which were analyzed using EPA Method TO-15. The quality assurance quality control (QA/QC) documents are provided with the soil vapor laboratory reports.

2.4.3 Indoor and Outdoor Air Sampling

Indoor air sampling locations were selected to provide data to evaluate potential indoor air risk to possible future occupants of the Industrial Arts buildings IA4, IA5A, IA5B, and IA6.

On October 5 and 6, 2018, air samples were collected in 6-liter Summa canisters from each of the four rooms listed directly above. Air samples were collected on October 5 with the HVAC system in normal operating mode (on) and October 6 with the HVAC system non-operating (off) mode. Three outdoor background ambient air samples were collected on both days, as well as a sub-slab probe with the highest detection from previous sampling events in each room was selected for resampling to characterize the concentrations of target analytes to aid in interpreting the indoor air results. This included location AOC4-SS5 in Room IA6; AOC4-SS3 in Room IA4; AOC4-SS7 Room IA5B; and AOC4-SS12 in Room IA5A.

An additional round of indoor and outdoor air sampling was conducted in January 2019 to provide additional characterization during the winter season. The samples collected during the winter season event with the HVAC system on and at the same locations as the October 5 and 6 events. Additionally, air sampled were collected in the underground utility tunnel located to the west and south of the Industrial Arts Building.

The indoor air and outdoor background ambient air sampling locations are depicted on Figure 4.

2.4.4 Indoor/Outdoor Sampling Methodology and Procedures

For indoor air sampling in the classrooms, the windows and doors of the building were closed, and ingress / egress activities to the building were minimized.

- Personnel was onsite for the duration of the sampling event to document conditions during the sampling.
- The air inlet for the sampling Summas were located approximately 4 to 5 feet above the ground surface in the breathing zone. The indoor air samples were collected in the middle of each room, away from doors.
- Each sampling Summa container was equipped with a dedicated vacuum gauge and laboratory-calibrated flow regulator.

The outdoor air samples were collected in a location that was generally upwind of known subsurface plumes. Each outdoor air sampler was placed approximately 4 to 5 feet above the ground and was collected at the same time the indoor samples were collected. Current wind conditions were checked minutes prior to the start of the air sample collection and throughout each event, by using the weather data provided from nearby Van Nuys Airport, on the website https://www.windfinder.com/report/van nuys airport. The recorded wind directions are

presented in **Appendix B**. To the extent feasible, the outdoor air samples were located away from obvious chemical sources such as powered engines, trash areas, etc.

The air samples were collected directly into pre-cleaned, batch-certified, 6-liter, flow-controlled, evacuated Summa canisters. The laboratory provided flow controllers were pre-calibrated to collect the air samples at 12.5 milliliters per minute (mL/min) over an 8-hour period.

The collection of indoor air was initiated at each Summa canister at approximately the same time (within several minutes of each other). Each sample was finished when either the vacuum in the canister reached approximately 2 to 3 inches of mercury prior to 8 hours, or after eight hours from the sample start time.

Sub-Slab samples (at select locations) were collected directly into pre-cleaned, batch-certified, 1-liter, flow-controlled evacuated Summa canisters immediately after indoor air sampling was completed. The laboratory provided flow controllers were pre-calibrated to collect the air samples at 200 cc/min.

The initial and final vacuum in each canister was recorded on the CoC form and in the field log book. The completed CoC was sent with the air sample shipment to the laboratory.

2.4.5 Sample Analysis

The indoor air, outdoor air, and select sub-slab samples were collected and analyzed for selected VOCs using Environmental Protection Agency (EPA) Method TO-15. Analytical services were provided by Jones Environmental, Inc., with a laboratory accredited by the Environmental Laboratory Accreditation Program (ELAP) certified.

2.5 EQUIPMENT DECONTAMINATION

Down-hole equipment used during soil sampling activities was decontaminated prior to use at each sampling point to reduce the potential for cross-contamination. Reusable sampling equipment was decontaminated between each sampling event using the following procedures:

- Wash with Liquinox and brush to remove excess contaminants;
- Rinse with distilled water; and
- Rinse twice with distilled water.

2.6 INVESTIGATIVE DERIVED WASTE

Used personal protective equipment and disposable equipment was double-bagged and placed in the on-site dumpster. These wastes are not considered hazardous and were sent to a municipal landfill.

One 55-gallon drum of soil cuttings was generated during the field activities. The soil was temporarily stored on-site in the labeled Department of Transportation-approved drum pending disposal profiling. The drum was removed by Belshire Environmental Services, Inc. (BESI) on

November 9, 2018. The drums were disposed of at Soil Safe in Adelanto, California. Drum disposal documentation is provided in **Appendix C**.

2.7 BUILDING INVENTORY

A building inventory survey was conducted in accordance with DTSC's vapor intrusion guidance (DTSC, 2011). Indoor sources of contamination were identified and photographed prior to indoor air sampling. Each room was inspected, and products that contain volatile chemicals were listed on the Building Screening Form, along with the volatile ingredients of each product (**Appendix D**). A photoionization detector (PID) was used to measure total VOCs from areas where products were stored. There were no PID readings above background concentrations (i.e., 0.0 parts per million).

3.0 RESULTS

3.1 Introduction

This section discusses the results of the soil and soil vapor sampling. Soil samples were analyzed by TestAmerica Laboratories, Inc., an Environmental Laboratory Accreditation Program (ELAP)-certified laboratory located in Irvine, California. The soil gas mobile laboratory and fixed-laboratory samples were analyzed by Jones Environmental, Inc. The data were reviewed and are considered acceptable for decision-making purposes. Copies of soil analytical laboratory reports are provided in **Appendix E**, and soil gas and air sample analytical laboratory reports are provided in **Appendix F**.

3.2 SOIL ANALYTICAL RESULTS

Analytical results from the soil sampling during installation of probe locations AOC4-SV14 through AOC4-SV17 are summarized in the following sections. The results are discussed for compounds that were previously analyzed in soil. The polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), and VOCs analytical data are compiled in **Tables 1 – 3**, **respectively**, and the soil sample locations are presented on **Figure 3**.

The samples were analyzed by TestAmerica using the following methods:

- PCBs by US EPA Method 8082
- TPH by US EPA Method 8015M
- VOCs by US EPA Method 8260B

3.2.1 **PCBs**

Eight primary and two duplicate soil samples were collected within AOC4 during the supplemental phase of work and analyzed for PCBs. The soil samples were collected during installation of soil vapor probes AOC4-SV14 through AOC4-SV17 at 5 and 15 ft bgs. PCBs were not detected above their respective laboratory reporting limits in any of the samples analyzed. Based on these results, PCBs are not considered a Site chemical of concern (COC). The PCB laboratory data results are provided in **Table 1.**

3.2.2 TPH

Eight primary and two duplicate soil samples were collected within AOC4 during the supplemental phase of work and analyzed for TPH in the gasoline range (GRO), diesel range (DRO), and oil range (ORO) organics. GRO was not detected above the laboratory reporting limit in the 10 samples analyzed. DRO was detected above the laboratory reporting limit in one sample analyzed (sample AOC4-SV17-5); the reported concentration was 3.5J (estimated value). ORO was detected above the method detection limit in 10 soil samples ranging in concentration from 3.2J milligrams per kilogram (mg/kg) (AOC4-SV16-15) to 10 mg/kg (AOC4-SV17-5). Detections of

ORO were below the San Francisco RWQCB RSL of 12,033 mg/kg (San Francisco Regional Board 2019). The analytical results are provided in **Table 2**. Based on these results, TPH is not considered a Site COC.

3.2.3 VOCs in Soil

Eight primary and two duplicate soil samples were collected within AOC4 during the supplemental phase of work and analyzed for VOCs. No VOC compounds were detected in soil above their respective reporting limits. The analytical results are provided in **Table 3**.

3.3 SOIL VAPOR SAMPLING RESULTS

3.3.1 VOCs in Soil Vapor Probes

Dual-nested soil vapor probes were installed at four new locations (AOC4-SV14 through AOC4-SV17) to further delineate tetrachloroethene (PCE) in soil vapor.

A total of 41 soil vapor samples, including duplicates, were collected from selected soil vapor probes as directed by LAUSD, on September 5 and 19 and October 9, 2018 and January 3, 2019. Some of the sampled probes were resample events to provide additional comparison data. The vapor samples were analyzed by Jones Environmental mobile or fixed laboratory for VOCs during each of the sample events. LAUSD OEHS requested that the current analytical data generated during the supplemental sampling and analyses be compared against the DTSC's future PSLs. PCE concentrations ranged from 1.7 micrograms per cubic meter (µg/m³) (AOC4-SV17-5) to 1,440 µg/m³ (AOC4-SV10-5). PCE was detected above the future PSL 15 µg/m³ at 31 sample (either 5 or 15 ft bgs) locations. The future DTSC PSL for naphthalene is 2.8 µg/m³. Naphthalene exceeded the future PSL concentration in five of the 41 samples, ranging from 3.0 µg/m³ (AOC4-SV16-5) to 774 μg/m³ (AOC4-SV8-15). Benzene exceeded the future PSL concentration (3.2) ug/m³) in one (AOC4-SV8-15) of the 41 samples, at 7 μg/m³. 1,2,4-Trimethylbenzene exceeded the future PSL concentration (2,100 µg/m³) in one (AOC4-SV8-15) of the 41 samples, at 2,440 μg/m³. Note that for benzene and naphthalene the non-detect values reported by the laboratory are the method detection limits; some of which exceed the future PSLs. No other VOCs were detected above their respective current PSLs. The analytical results are provided in Table 4 and the soil vapor probe locations are presented on Figure 3.

3.3.2 VOCs in Sub-Slab Soil Vapor Pins

Three sub-slab soil vapor pins (AOC4-SS1 through AOC4-SS3) were installed prior to the supplemental assessment activities. For the supplemental assessment activities, sub-slab vapor pins AOC4-SS4 through AOC-SS12 were installed inside the Industrial Arts buildings, to evaluate PCE beneath the foundation slab. The vapor pin locations are depicted on **Figure 3**.

Between September 19, 2018 and January 3, 2019, 23 sub-slab vapor pins were sampled for soil vapor, including duplicate samples. The vapor samples were analyzed by Jones Environmental,

Inc. PCE concentrations in the sub-slab vapor pins sampled between September 15, 2018 and January 3, 2019 ranged from $18 \mu g/m^3$ (AOC4-SS10) to 1,300 $\mu g/m^3$ (AOC4-SS3).

On October 5, 2018 one vapor pin in each of the four Industrial Arts building classrooms was sampled while the building HVAC system was in normal operating mode, and the same four vapor pins were then sampled the following day (October 6) while the HVAC system was in nonoperating (off) mode. The four vapor pins (AOC4-SS3, AOC4-SS5, AOC4-SS7, and AOC4-SS12) were chosen to be sampled based on the relatively higher PCE concentrations observed during previous sampling events. The PCE concentrations in the four vapor pins results from October 5, 2018 ranged from 4 µg/m³ (AOC4-SS5) to 373 µg/m³ (AOC4-SS3). The PCE concentrations in the four vapor pins results from October 6, 2018 ranged from 9 µg/m³ (AOC4-SS7) to 374 µg/m³ (AOC4-SS3). The PCE concentrations in the four vapor pins results from the January 3, 2019 event ranged from 42.6 μg/m³ (AOC4-SS5) to 245 μg/m³ (AOC4-SS3). There did not appear to be a discernable PCE concentration trend correlating with the HVACs operational mode. PCE exceeded the future RSL (15 μg/m³) in 21 of the 23 sub-slab vapor pin samples during the vapor sampling events. Benzene did not exceed the future RSL $(3.2 \mu g/m^3)$ in any of the vapor pins sampled during the supplemental sampling events. Note that some of the benzene reporting limits were above the future RSL. This is not considered a likely potential risk, based on the number of samples with benzene reported, and the overall benzene concentrations of the samples. The sub-slab vapor pin laboratory results are tabulated in **Table 5**.

3.3.3 VOCs in Indoor and Outdoor Air

Twenty-three (23) indoor air samples IAS-1 through IAS-4 and outdoor air samples OAS-1 through OAS-3, including two duplicates were sampled on October 5 and 6, 2018, and on January 3, 2019. Additionally, two underground utility tunnel air samples (UT-1 and UT-2) were sampled on January 3, 2019. The indoor air and outdoor air samples, including the underground utility tunnel air samples results are provided on **Table 6**.

The indoor and outdoor air samples were collected to compare against the soil vapor data collected simultaneously from the Industrial Art building classrooms.

PCE was not detected above the residential PSL $(0.46 \mu g/m^3)$ in any of the 23 indoor, outdoor, or underground utility tunnel air samples collected on any of the three sample dates.

On October 5, 2018, when the HVAC system was in normal operating mode, benzene concentrations in the four indoor air samples ranged from 0.44 $\mu g/m^3$ to 0.46 $\mu g/m^3$. Benzene concentrations in the three outdoor air samples ranged from 0.38 $\mu g/m^3$ to 0.43 $\mu g/m^3$. The benzene PSL for residential air is 0.097 $\mu g/m^3$. The essentially equal concentrations of benzene reported in the indoor and outdoor air samples indicate that benzene is associated with ambient sources and is not migrating from beneath the building foundations and accumulating in indoor air when the HVAC system is operating.

On October 6, 2018, when the HVAC system was in non-operating (off) mode, benzene concentrations in the four indoor air samples ranged from $0.78~\mu g/m^3$ to $1.06~\mu g/m^3$. Benzene

concentrations in the three outdoor air samples ranged from $0.35~\mu g/m^3$ to $0.61~\mu g/m^3$. The concentrations of benzene reported in the indoor air is slightly higher than the benzene concentrations in outdoor air samples, which could indicate benzene is migrating from beneath the building foundations and accumulating in indoor air. The slight difference in the benzene results may also be attributed to natural air flow variability inside and outside the rooms. However, benzene was not detected above the reporting limit in the sub-slab soil vapor samples collected during the same sample events, indicating that benzene detected in the indoor air samples is unlikely to have migrated from beneath the building foundation into indoor.

On January 3, 2019, when the HVAC system was in normal operating mode, benzene concentrations in the four indoor air samples ranged from 1.34 μ g/m³ (IAS-4) to 2.33 μ g/m³ (IAS-1). Benzene concentrations in the three outdoor air samples ranged from 1.56 μ g/m³ (OAS-3) to 1.85 μ g/m³ (OAS-1). The essentially equal concentrations of benzene reported in the indoor and outdoor air samples indicate that benzene is associated with ambient sources is not migrating from beneath the building foundations and accumulating in indoor air.

3.4 DELINEATION OF IMPACTS IN SOIL

For the supplemental scope of work, soil samples were collected during the installation of soil vapor probes AOC4-SV14 through AOC4-SV17, at 5 and 15 ft bgs. VOCs were not detected above their respective reporting limits in soil samples collected from the four vapor probe locations. VOCs in soil are considered laterally delineated to the west of the Industrial Arts buildings by the lack VOC concentrations in AOC4-SV16, and to the north by AOC4-SV17. **Table 3** provides VOC data from the soil samples collected.

There were no GRO detections in the soil samples above laboratory reporting limits, and only one DRO detection (low, estimated value) (3.5J mg/kg in sample AOC4-SV17 at 5 ft bgs). There were no ORO detections above 10 mg/kg in any of the soil samples analyzed. Note the San Francisco Regional Water Quality Control Board (2016) ORO screening level is 10,746 mg/kg. There were no PCB detections above their respective laboratory reporting limits in any of the soil samples collected from AOC4-SV14 through AOC4-SV17. Therefore, GRO, DRO and ORO (TPH) and PCBs are considered delineated to the west of the Industrial Arts buildings by the lack of TPH and PCB detections in AOC4-SV16, and to the north by AOC4-SV17. **Figure 3** depicts soil sampling locations.

The vertical extent of soil exceedances was defined by previous sampling (Parsons, 2018) and the 15 ft bgs sample analyses from soil vapor probes AOC4-SV14 through AOC4-SV17.

3.5 DELINEATION OF IMPACTS IN SOIL VAPOR

Based on the VOC results of soil vapor sample events between September 15, 2018 and January 3, 2019, the VOC-impacts in the Industrial Arts building area have been laterally delineated with respect to the overall soil vapor source. VOCs are considered delineated to the west of the Industrial Arts buildings by the relatively low VOC concentrations in AOC4-SV16 soil vapor, and

by the relatively low VOC concentrations in AOC4-SV17 soil vapor to the north. VOC concentrations are delineated by location AOC4-SV5 to the east. Soil vapor is delineated farthest south by soil vapor samples collected from AOC5-SV1 and AOC5-SV2. Soil vapor is not delineated at location AOC4-SV12 which south of the Industrial Arts building but north of the underground utility tunnel (**Figure 4**).

Naphthalene, ethylbenzene, and 1,2,4-trimethylbenzene were detected in soil vapor samples from probes AOC4-SV8 at 5 and 15 ft bgs during the September 15, 2018 event. Similar elevated concentrations of these compounds were not detected during the previous sample event (April 21, 2018) at AOC4-SV8 and have not been observed in any of the other soil vapor probes sampled during multiple events during the initial and supplemental scope of work. These two detections from the September 15, 2018 sample event are considered anomalous. **Table 4** provides the soil vapor probe sampling results and **Figure 3** provides the soil vapor sampling locations.

Specifically, PCE concentrations in soil vapor exceeded the future PSL (15 µg/m³) at most of the soil vapor probes sampled during the supplemental scope of work. PCE concentrations in soil vapor were detected at or below the PSL in soil vapor probes AOC4-SV16 and AOC4-SV17, west and north of the Industrial Arts buildings. PCE in soil vapor at AOC4-SV5 east of the Industrial Arts buildings was at or below the future PSL. PCE in soil vapor at AOC4-SV12 south of the Industrial Arts buildings was below the current PSL but above the future PSL. The previously sampled AOC5-SV1 and AOC5-SV2 soil vapor probe data define VOCs to the south of the Industrial Arts buildings. **Figure 5** and **6** present iso-concentrations of PCE in the 5-ft bgs and 15-ft bgs soil vapor probes. To be conservative the highest detection was used at each probe location.

AOC4-SV14 and AOC4-SV15 were installed and sampled to correlate VOC concentrations in the shallow subsurface beneath the classrooms with VOCs in the nearby sub-slab vapor pin locations AOC4-SS6 and AOC4-SS9, respectively. VOCs are considered laterally delineated to the west of the Industrial Arts buildings by the lack VOC concentrations in AOC4-SV16, to the north by AOC4-SV17, and to the east by AOC4-SV5.

4.0 FIELD VARIANCES

Field conditions caused the following variances from the original scope of work:

- Sub-slab vapor pin AOC4-SS6 was unable to be purged or sampled due to no flow in the system.
- Soil vapor samples collected from locations AOC4-SV16 and AOC4-SV17 on October 9, 2018, were analyzed for VOCS by Method TO-15 which provided lower reporting and method detection limits compared to Method 8260.

5.0 HUMAN HEALTH SCREENING EVALUATION

This section presents the human health screening evaluation (HHSE) portion of the PEA-E. The HHSE evaluates potential impacts to human health from exposure to the chemicals detected in soil and soil vapor at the Site. Following the PEA Guidance Manual (DTSC, 2015a), the HHSE is performed within the context of a health risk assessment that addresses an unrestricted future residential land-use scenario, which is more health-protective than the existing and continued use of the Site as a school.

5.1 Soils

Soil was sampled for PCBs (**Table 1**), TPH (**Table 2**), and VOCs (**Table 3**) during the supplemental investigation. All detections were below the PSLs. This indicates that potential future residential exposures to these chemicals in soils result in a residential risk estimate less than 1×10^{-6} and noncancer hazard quotient less than one, which is acceptable.

5.2 SOIL VAPOR/SUB-SLAB SOIL VAPOR/INDOOR AIR

In the soil vapor samples collected at the site, benzene, naphthalene, PCE, and 1,2,4-trimethylbeznene were detected at or above the future PSLs (see **Table 4**). Benzene, naphthalene, and PCE were also detected above the current PSLs. In the sub-slab soil vapor samples, only benzene and PCE were detected above the current and future PSLs (**Table 5**). In contrast, in both indoor and outdoor air, only benzene was detected above the PSLs (**Table 6**).

Benzene. Outside of the buildings at the site, benzene was detected above the future PSLs at 15ft bgs at sample locations AOC4-SV8 and AOC4-SV12. However, benzene was not detected in the 5-ft bgs sample at the same locations. This likely indicates that benzene is degrading as it migrates through the soil column and that benzene in soil vapor at AOC4-SV8 and AOC4-SV12 does not represent a potential risk. However, benzene was also detected above the future PSLs in three sub-slab soil vapor samples at up to 64 times the current PSL. It should be noted that using the default DTSC (2011) and USEPA (2015) sub-slab soil vapor attenuation factors, the maximum detected sub-slab soil vapor benzene concentration of 209 µg/m³ corresponds to indoor air concentrations of 10.45 and 6.27 µg/m³, respectively. This is not substantially greater than the ambient concentrations at the two nearest Air Resources Board monitoring stations; i.e., Simi Valley (0.19 to 1.371 μ g/m³ for 2017) and Burbank (0.50 to 4.79 μ g/m³ for 2013). Lastly, it should be noted that benzene was measured in indoor and outdoor air in three separate sampling events at the site. In two events, benzene concentrations were roughly equivalent in the indoor and outdoor air samples but were not detected in the sub-slab samples. In the third event, benzene was slightly higher in the indoor air samples than in the outdoor air samples but was not detected in the subslab samples. Overall, benzene in soil vapor and sub-slab soil vapor at the Site does exceed the

future PSLs, but the concentrations of benzene in indoor air and outdoor air appear to be relatively similar, indicating that benzene does not represent a potential vapor intrusion issue.

Naphthalene. As stated in Section 3.5, the detection of naphthalene above the future PSLs in AOC4-SV8 is considered anomalous and is not evaluated in this risk assessment. Naphthalene also exceeded the future PSLs (but not current) at AOC4-SV16 and AOC4-SV17 at 5 and 15 ft bgs in the samples collected on October 9, 2018. However, naphthalene was also not detected in same probes in the samples collected on January 3, 2019. The detections in October 2018 were only slightly above the detection limits in January 2019; i.e., 3.0 to 4.0 μg/m³ vs. 2.0 μg/m³. Thus, naphthalene may have been present below the detection limit in the January 2019 samples. Using the future attenuation factors, these soil gas concentrations result in estimated indoor air concentrations of 0.09 to 0.12 μg/m³ and a risk of approximately 1 x 10^{-6} for residential receptors. While the indoor and outdoor air samples were not analyzed for naphthalene, ambient concentrations in central Los Angeles, Rubidoux, and North Long Beach ranged from 0.03 to 0.73 μg/m³ in 2003 to 2004 (SCAQMD 2008). As this ambient range exceeds the predicted indoor air concentrations, naphthalene in soil gas at the Site would not likely result in indoor air concentrations above ambient conditions and does not represent a potential vapor intrusion issue.

1,2,4-Trimethylbenzene. As stated in Section 3.5, the one detection of 1,2,4-trimethylbenzene above the future PSLs is considered anomalous and is not evaluated in this risk assessment.

Tetrachloroethene (PCE). In the sub-slab soil vapor samples, PCE was detected at up to 1,300 µg/m³, which is 85 times the current (and more conservative) PSL. In the soil vapor probes installed outside of the buildings, PCE was detected at up to 1,440 µg/m³, which is three times the current PSL but 94 times the future PSL. Using the default DTSC (2011) and USEPA (2015) subslab soil vapor attenuation factors, the maximum detected sub-slab soil vapor concentration of 1,300 µg/m³ corresponds to indoor air concentrations of 65 and 39 µg/m³, respectively. These concentrations are substantially greater than the ambient concentrations at the two nearest Air Resources Board monitoring stations; i.e., Simi Valley (0.034 to 0.20 µg/m³ for 2017) and Burbank (0.14 to 1.15 µg/m³ for 2013). Due to the potential risks from PCE, three indoor and outdoor air sampling events were conducted at the Site. While PCE was detected in almost all indoor air samples, all of the results were below the residential PSL, both with the HVAC system on and with it off. Thus, even under worst-case conditions (i.e., HVAC off, which reduces the dilution of indoor air with outdoor air), exposures to PCE in indoor air result in a residential risk estimate less than 1 x 10⁻⁶ and noncancer hazard quotient less than one, which is acceptable. It should be acknowledged, however, that while the current building appears to limit vapor intrusion by PCE, the concentrations are high enough in sub-slab soil gas that there is still a potential for concern if there is new building construction and the existing building is replaced.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The following conclusions were derived from the supplemental investigation conducted at Reseda High School for soil, soil vapor and indoor air. Previous recommendations regarding the presence of lead and arsenic in soil above their respective PSLs are documented in the PEA-E Report (Parsons, 2018a).

Soil

 Soil was sampled for PCBs, TPH, and VOCs during the supplemental investigation in AOC4. There were no detections above the PSLs, which is consistent with the original investigation results (Parsons, 2018a). Therefore, PCBs, TPH, and VOCs are not considered COCs in soil.

Soil Vapor

- A total of 41 soil vapor samples, including duplicates, were collected from selected soil vapor probes during the supplemental investigation on September 5 and 19, October 9, 2018 and January 3, 2019 to further characterize soil vapor concentrations in AOC4. Select probes were sampled in multiple events to provide additional data for decision-making purposes. LAUSD OEHS requested that the analytical data now be compared against the DTSC's future PSLs. PCE was detected above the future PSL (15 µg/m³) at 31 sample (either 5 or 15 ft bgs) locations. In the 41 vapor samples, PCE concentrations ranged from $1.7 \mu g/m^3$ (AOC4-SV17-5) to 1,440 $\mu g/m^3$ (AOC4-SV10-5). The future PSL for naphthalene is 2.8 μg/m³. Naphthalene exceeded the future PSL concentration in five of the 41 samples, ranging from 3.0 μ g/m³ (AOC4-SV16-5) to 774 μ g/m³ (AOC4-SV8-15). 1,2,4-trimethylbenzene exceeded the future PSL concentration (2,100 µg/m³) in one (AOC4-SV8-15) of the 41 samples, at 2,440 µg/m³. Benzene exceeded the future PSL concentration (3.2 μ g/m³) in one (AOC4-SV8-15) of the 41 samples, at 7 μ g/m³. Note that for benzene and naphthalene the non-detect values reported by the laboratory are the method detection limits; some of which exceed the future PSLs. No other VOCs were detected above their respective PSLs.
- Based on the multiple soil vapor sampling events from previously installed and more recently installed soil vapor probes, vapor-phase VOCs are considered laterally delineated but not vertically delineated (**Figures 5 and 6**). VOCs, including PCE (the most prevalent compound of concern), was detected above the future PSLs in soil vapor at 5- and 15-ft bgs at probe locations in many of the previously installed soil vapor probe locations (AOC4-SV1 through AOC4-SV13) and in the soil vapor probe locations AOC4-SV13 through AOC4-SV15 installed for the supplemental investigation.
- Several soil vapor probes had reported concentrations of naphthalene and 1,2,4-trimethylbenzene above their respective future PSL. As discussed in Section 3.5, these

- two compounds have not been observed in any of the other soil vapor probes sampled during multiple events during the initial and supplemental scope of work. Given the sporadic and isolated nature of these detections they are not considered Site COCs.
- On September 15 and 19, 2018, 12 sub-slab vapor pins were sampled for soil vapor. PCE concentrations in the sub-slab vapor pins sampled on September 15 and 19, 2018 ranged from 18 μg/m³ (AOC4-SS10) to 1,300 μg/m³ (AOC4-SS-3). Based on PCE concentrations exceeding the sub-slab PSLs, indoor and outdoor air sampling was conducted to further assess vapor intrusion potential to indoor air.
- Benzene was detected at concentrations above the future PSLs at various soil vapor probes and sub-slab probes during the initial investigation (May 2018 event). Subsequent sampling of these and additional probes conducted during supplemental investigation did not confirm the continued presence of benzene in soil vapor probes and sub-slab probes. Based on the benzene detections during the initial investigation it is considered a Site COC.

Indoor Air

During the supplemental investigation, three indoor and outdoor air sampling events were conducted using Summa canisters. For each event, three outdoor air samples and four indoor air samples were collected. These samples were collected concurrent with selected sub-slab vapor pins to help interpret the origin of any indoor air VOC detections.

- PCE was not detected above the residential PSL (0.46 μg/m³) in any of the 23 indoor, outdoor, or underground utility tunnel air samples collected on any of the three sample dates. Low concentrations of PCE were detected with the HVAC system on and with it off. Thus, even under worst-case conditions (i.e., HVAC off, which reduces the dilution of indoor air with outdoor air), exposures to PCE in indoor air result in a residential risk estimate less than 1 x 10⁻⁶ and noncancer hazard quotient less than one, which is acceptable. Although PCE concentrations are below the PSL in indoor air, the sub-slab concentrations are high enough that there is still a potential for concern if the existing building is replaced by a new building.
- As discussed in Section 5.2, benzene in soil vapor and sub-slab soil vapor at the Site does
 exceed the future PSLs, but the concentrations of benzene in indoor air and outdoor air
 appear to be relatively similar, indicating that benzene does not represent a potential vapor
 intrusion issue.

6.2 RECOMMENDATIONS

The following are recommendations based on the above conclusions:

 A Removal Action Workplan (RAW) should be developed for the Site to address PCE and benzene soil vapor impacts above the future PSLs, as well as to address previously identified (Parsons, 2018a) shallow soils impacted with lead and/or arsenic above their PSLs.

7.0 REFERENCES

- Chernoff G, Bosan W, Oudiz D. 2008. Determination of a Southern California regional background arsenic concentration in soil.
- DTSC, 2011. Guidance for the evaluation and mitigation of subsurface vapor intrusion to indoor air (vapor intrusion guidance). Final.
- DTSC 2015a. Preliminary Endangerment Assessment Manual. A guidance manual for evaluating hazardous substance release sites.
- DTSC, 2015b. Department of Toxic Substances Control (DTSC) 2015 Advisory Active Soil Gas Investigations
- DTSC, 2018. HERO HHRA Note Number 3, DTSC-Modified Screening Levels (DTSC-SLs). June.
- Haley and Aldrich, 2018. Vapor intrusion workshop summary from the 2018 West Coast AEHS International Conference on Soil, Water, Energy, and Air. Available at: https://www.haleyaldrich.com/Portals/0/Downloads/HA%20Technical%20Update%20-%20VI%20Workshop%20Summary.pdf
- OEHHA, 2007. Development of health criteria for schools site risk assessment pursuant to Health and Safety Code Section 901(g): child-specific benchmark change in blood lead concentration for school site risk assessment.
- OEHHA, 2009. Revised California human health screening levels for lead.
- Parsons, 2018a. *Preliminary Endangerment Assessment Equivalent Report*. Reseda High School Comprehensive Modernization Project, 18230 Kittridge Street, Reseda, California 91335. August 7.
- Parsons, 2018b. *Draft Indoor Air Sampling Workplan*. Reseda High School Comprehensive Modernization Project, 18230 Kittridge Street, Reseda, California 91335. October 3.
- SCAQMD, 2008. Multiple Air Toxics Exposure Study in the South Coast Air Basin. Available online at http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii/mates-iii-final-report
- SFBRWQCB, 2019. *Environmental Screening Levels*. Available online at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
- USEPA, 2010. Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds. EPA/100/R-10/005.
- USEPA, 2015. OSWER technical guide for assessing and mitigating the vapor intrusion pathway from subsurface vapor sources to indoor air. OSWER Publication 9200.2-154.
- USEPA, 2018. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November. Available online at https://www.epa.gov/risk/regional-screening-levels-rsls



TABLE 1
ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL LAUSD Reseda High School Supplemental PEA Equivalent

Sample ID	Sample Collection Date	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Units	Units		μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg
PSLs		4,100	200	170	230	230	240	240
AOC4-B1-5.0	12/22/2017	ND<50						
AOC4-B1-5.0 DUP	12/22/2017	ND<50						
AOC4-B2-5.0	12/22/2017	ND<50						
AOC4-SV6-5	3/26/2018	ND<49						
AOC4-SV6-15	3/26/2018	ND<49						
AOC4-SV8-5	3/26/2018	ND<50						
AOC4-SV8-15	3/26/2018	ND<49						
AOC4-SV9-5	3/26/2018	ND<49						
AOC4-SV9-15	3/26/2018	ND<50						
AOC4-SV9-15 DUP	3/26/2018	ND<49						
AOC4-SV10-5	3/26/2018	ND<49						
AOC4-SV10-15	3/26/2018	ND<49						
AOC4-SV11-5	5/12/2018	ND<50						
AOC4-SV11-15	5/12/2018	ND<50						
AOC4-SV12-5	5/12/2018	ND<49						
AOC4-SV12-15	5/12/2018	ND<50						
AOC4-SV13-5	5/12/2018	ND<49						
AOC4-SV13-15	5/12/2018	ND<49						
AOC4-SV13-15DUP	5/12/2018	ND<48						
AOC4-SV14-5	9/10/2018	ND<49						
AOC4-SV14-15	9/10/2018	ND<50						
AOC4-SV15-5	9/10/2018	ND<50						
AOC4-SV15-15	9/10/2018	ND<49						
AOC4-SV15-15D	9/10/2018	ND<49						
AOC4-SV16-5	10/6/2018	ND<50						
AOC4-SV16-5D	10/6/2018	ND<50						
AOC4-SV16-15	10/6/2018	ND<49						
AOC4-SV17-5	10/6/2018	ND<50						
AOC4-SV17-15	10/6/2018	ND<49						

NOTES:

ug/kg - micrograms/ kilogram

PCBs = polychlorinated biphenyls analyzed by Environmental Protection Agency Method 8082

ND = not detected

J = estimated at the value given

PSL = Preliminary Screening Level; i.e., DTSC (2018) residential SLs, as supplemented by USEPA (2018) residential RSLs

TABLE 2 ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL LAUSD Reseda High School Supplemental PEA Equivalent

Location	Sample ID	Sample Date	Sample Depth	GRO (C4-C12)	DRO (C13-C22)	ORO (C23-C40)
		Units		mg/kg	mg/kg	mg/kg
	USEI	PA Test Method		8015M	8015M	8015M
	SFB RWQCB ESL	(human health)		429	255	12,033
AOC4-B1	AOC4-B1-5.0	12/22/2017	5	<0.4	<5.0	5.1
AOC4-B1	AOC4-B1-5.0 DUP	12/22/2017	5	<0.39	<5.0	5.3
AOC4-B2	AOC4-B2-5.0	12/22/2017	5	<0.4	<5.0	4.6J
AOC4-SV6	AOC4-SV6-5	3/26/2018	5	<0.4	<5.0	3.3JB
AOC4-SV6	AOC4-SV6-15	3/26/2018	15	<0.4	<5.0	5.1B
AOC4-SV8	AOC4-SV8-5	3/26/2018	5	<0.4	<4.9	21B
AOC4-SV8	AOC4-SV8-15	3/26/2018	15	<0.4	<4.9	5.4B
AOC4-SV9	AOC4-SV9-5	3/26/2018	5	<0.4	<5.0	3.2JB
AOC4-SV9	AOC4-SV9-15	3/26/2018	15	<0.4	<4.9	2.8JB
AOC4-SV9	AOC4-SV9-15 DUP	3/26/2018	15	<0.39	<4.9	<4.9
AOC4-SV10	AOC4-SV10-5	3/26/2018	5	<0.4	<4.9	3.6JB
AOC4-SV10	AOC4-SV10-15	3/26/2018	15	<0.4	<4.9	<4.9
AOC4-SV11	AOC4-SV11-5	5/12/2018	5	<0.4	<4.9	5.9
AOC4-SV11	AOC4-SV11-15	5/12/2018	15	<0.4	<4.9	3.2J
AOC4-SV12	AOC4-SV12-5	5/12/2018	5	<0.39	<4.9	4.8J
AOC4-SV12	AOC4-SV12-15	5/12/2018	15	<0.4	<5.0	3.7J
AOC4-SV13	AOC4-SV13-5	5/12/2018	5	<0.4	<4.9	2.4J
AOC4-SV13	AOC4-SV13-15	5/12/2018	15	<0.4	<5.0	2.5J
AOC4-SV13	AOC4-SV13-15DUP	5/12/2018	15	<0.39	<5.0	<5.0
AOC4-SV14	AOC4-SV14-5	9/10/2018	5	<0.4	<4.9	5.8B
AOC4-SV14	AOC4-SV14-15	9/10/2018	15	<0.4	<4.9	4.3J,B
AOC4-SV15	AOC4-SV15-5	9/10/2018	5	<0.4	<4.9	6.6B
AOC4-SV15	AOC4-SV15-15	9/10/2018	15	<0.4	<4.9	4.3J,B
AOC4-SV15	AOC4-SV15-15D	9/10/2018	15	<0.39	<4.9	4.0J,B
AOC4-SV16	AOC4-SV16-5	10/6/2018	5	<0.4	<5.0	4.3J
AOC4-SV16	AOC4-SV16-5D	10/6/2018	5	<0.4	<5.0	6.5
AOC4-SV16	AOC4-SV16-15	10/6/2018	15	<0.4	<5.0	3.2J
AOC4-SV17	AOC4-SV17-5	10/6/2018	5	<0.4	3.5J	10
AOC4-SV17	AOC4-SV17-15	10/6/2018	15	<0.4	<5.0	3.4J

NOTES:

mg/kg - miligrams/ kilogram DRO = diesel range organics
TPH = total petroleum hydrocarbons ORO = oil range organics
GRO = gasoline range organics ND = not detected

Per DTSC (2015) guidance, concentrations are compared to SFRWQCB (2019) risk-based direct contact screening levels.

Total petroleum hydrocarbons analyzed by Environmetnal Protection Agency Method 8015M

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit (concentration is an estimated value).

B = Compound was found in the blank and sample.

TABLE 3
ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN SOIL
LAUSD Reseda High School Supplemental PEA Equivalent

			6							422	
Lasatian	Campula ID	Campula Data	Sample	D	2 Deutemen	Falsa IIIs a sa a sa a	Nia walla alia wa	DCE	Talmana	1,2,3-	All Oth 1/00-
Location	Sample ID	Sample Date	Depth			Ethylbenzene	Napthalene	PCE	Toluene	Trichlorobenzene	All Other VOCs
Units			ft bgs	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg
USEPA Test Method				8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B
PSL				330	27,000,000	5,800	3,800	590	1,100,000	63,000	
AOC4-B1	AOC4-B1-5.0	12/22/2017	5	1.8	ND<9.2	ND<1.8	ND<4.6	ND<1.8	2.0	ND<4.6	ND
AOC4-B1	AOC4-B1-5.0 DUP	12/22/2017	5	2.2	ND<8.9	0.94J	ND<4.4	ND<1.8	2.7	ND<4.4	ND
AOC4-B2	AOC4-B2-5.0	12/22/2017	5	2.5	ND<11	ND<2.2	ND<5.5	ND<2.2	2.0J	ND<5.5	ND
AOC4-SV6	AOC4-SV6-5.0	3/26/2018	5	3.2	ND<9.4	1.3J	ND<4.7	ND<1.9	3.9	ND<4.7	ND
AOC4-SV6	AOC4-SV6-15	3/26/2018	15	1.7J	ND<10	ND<2.1	ND<5.2	ND<2.1	1.5J	ND<5.2	ND
AOC4-SV8	AOC4-SV8-5	3/26/2018	5	1.6	ND<8.0	2.0	ND<4.0	ND<1.6	3.0	ND<4.0	ND
AOC4-SV8	AOC4-SV8-15	3/26/2018	15	1.7	5.9J	1.1J	ND<4.3	ND<1.7	2.3	ND<4.3	ND
AOC4-SV9	AOC4-SV9-5	3/26/2018	5	2.2	ND<8.7	<1.7	ND<4.3	ND<1.7	2.5	ND<4.3	ND
AOC4-SV9	AOC4-SV9-15	3/26/2018	15	1.0J	ND<8.3	ND<1.7	ND<4.2	ND<1.7	1.2J	ND<4.2	ND
AOC4-SV9	AOC4-SV9-15 DUP	3/26/2018	15	0.97J	ND<9.1	ND<1.8	ND<4.5	ND<1.8	ND<1.5	ND<4.5	ND
AOC4-SV10	AOC4-SV10-5	3/26/2018	5	2.3	6.1J	1.5J	1.7J	1.2J	2.9	0.97J	ND
AOC4-SV10	AOC4-SV10-15	3/26/2018	15	1.3J	ND<8.2	ND<1.6	ND<4.1	ND<1.6	1.2J	ND<4.1	ND
AOC4-SV11	AOC4-SV11-5	5/12/2018	5	ND<1.6	ND<8.1	ND<1.6	ND<4.1	ND<1.6	ND<1.6	ND<4.1	ND
AOC4-SV11	AOC4-SV11-15	5/12/2018	15	ND<1.6	ND<7.8	ND<1.6	ND<3.9	ND<1.6	ND<1.6	ND<3.9	ND
AOC4-SV12	AOC4-SV12-5	5/12/2018	5	ND<1.6	ND<8.1	ND<1.6	ND<4.0	ND<1.6	ND<1.6	ND<4.0	ND
AOC4-SV12	AOC4-SV12-15	5/12/2018	15	ND<1.6	ND<7.8	ND<1.6	ND<3.9	ND<1.6	ND<1.6	ND<3.9	ND
AOC4-SV13	AOC4-SV13-5	5/12/2018	5	ND<1.4	ND<7.1	ND<1.4	ND<3.6	ND<1.4	ND<1.4	ND<3.6	ND
AOC4-SV13	AOC4-SV13-15	5/12/2018	15	ND<1.5	ND<7.4	ND<1.5	ND<3.7	ND<1.5	ND<1.5	ND<3.7	ND
AOC4-SV13	AOC4-SV13-15DUP	5/12/2018	15	ND<1.4	ND<7.0	ND<1.4	ND<3.5	ND<1.4	ND<1.4	ND<3.5	ND
AOC4-SV14	AOC4-SV14-5	9/10/2018	5	ND<1.6	ND<8.2	ND<1.6	ND<4.1	ND<1.6	ND<1.6	ND<4.1	ND
AOC4-SV14	AOC4-SV14-15	9/10/2018	15	ND<1.5	ND<7.3	ND<1.5	ND<3.7	ND<1.5	ND<1.5	ND<3.7	ND
AOC4-SV15	AOC4-SV15-5	9/10/2018	5	ND<2.1	ND<10	ND<2.1	ND<5.1	ND<2.1	ND<2.1	ND<5.1	ND
AOC4-SV15	AOC4-SV15-15	9/10/2018	15	ND<1.5	ND<7.5	ND<1.5	ND<3.8	ND<1.5	ND<1.5	ND<3.8	ND
AOC4-SV15	AOC4-SV15-15D	9/10/2018	15	ND<1.7	ND<8.7	ND<1.7	ND<4.4	ND<1.7	ND<1.7	ND<4.4	ND
AOC4-SV16	AOC4-SV16-5	10/6/2018	5	ND<1.9	ND<9.3	ND<1.9	ND<4.7	ND<1.9	ND<1.9	ND<4.7	ND
AOC4-SV16	AOC4-SV16-5D	10/6/2018	5	ND<1.8	ND<9.2	ND<1.8	ND<4.6	ND<1.8	ND<1.8	ND<4.6	ND
AOC4-SV16	AOC4-SV16-15	10/6/2018	15	ND<1.7	ND<8.3	ND<1.7	ND<4.1	ND<1.7	ND<1.7	ND<4.1	ND
AOC4-SV17	AOC4-SV17-5	10/6/2018	5	ND<1.9	ND<9.4	ND<1.9	ND<4.7	ND<1.9	ND<1.9	ND<4.7	ND
AOC4-SV17	AOC4-SV17-15	10/6/2018	5	ND<1.8	ND<8.8	ND<1.8	ND<4.4	ND<1.8	ND<1.8	ND<4.4	ND

NOTES:

μg/kg - micrograms/ kilogram

Volatile organic compounds analyzed by Environmetral Protection Agency Method 8260B

VOCs = Volatile organic compounds

PCE = tetrachloroethene

ND = not detected

PSL = Preliminary Screening Level; i.e., DTSC (2018) residential SLs, as supplemented by USEPA (2018) residential RSLs

Table 4
Soil Vapor Probe Sampling Analytical Results
LAUSD Reseda High School PEA Equivalent

Sample Location	Sample ID	Depth	Sample Date	Benzene	1,2,4- Trimethylben zene	Napthalene	Tetrachloroethene (PCE)	Other VOCs
Units	3	ft		ug/m3	ug/m3	ug/m3	ug/m3	
Cı	urrent Preliminary So	creening L	evel	97	63,000	83	460	
F	uture Preliminary Sc	reening Le	evel	3.2	2,100	2.8	15	
AOC4-SV1	AOC4-SV1-5	5	1/3/2018	ND<8.0	ND<8.0	ND<40	259	See Lab Report
	AOC4-SV1-15	15	1/3/2018	ND<8.0	ND<8.0	ND<40	322	See Lab Report
	AOC4-SV1-5	5	2/27/2018	ND<8.0	ND<8.0	ND<40	226	See Lab Report
	AOC4-SV1-5 REP	5	2/27/2018	ND<8.0	ND<8.0	ND<40	195	See Lab Report
	AOC4-SV1-15	15	2/27/2018	ND<8.0	ND<8.0	ND<40	257	See Lab Report
	AOC4-SV1-5	5	4/21/2018	ND<8.0	ND<8.0	ND<40	252	See Lab Report
	AOC4-SV1-15	15 5	4/21/2018 9/15/2018	ND<8.0	10 ND < 7	ND<40	294	See Lab Report
	AOC4-SV1-5 AOC4-SV1-15	15	9/15/2018	ND<2 ND<2	ND<7	ND<8	289 292	See Lab Report
	AOC4-SV1-15 AOC4-SV1-15REP	15	9/15/2018	ND<2	ND<7	ND<8	302	See Lab Report See Lab Report
AOC4-SV2	AOC4-SV2-5	5	1/3/2018	ND<8.0	ND<8.0	ND<40	186	See Lab Report
A004-3V2	AOC4-SV2-5 REP	5	1/3/2018	ND<8.0	ND<8.0	ND<40	197	See Lab Report
	AOC4-SV2-15	15	1/3/2018	ND<8.0	ND<8.0	ND<40	173	See Lab Report
	AOC4-SV2-5	5	2/27/2018	ND<8.0	ND<8.0	ND<40	149	See Lab Report
	AOC4-SV2-15	15	2/27/2018	ND<8.0	ND<8.0	ND<40	125	See Lab Report
AOC4-SV2	AOC4-SV2-5	5	9/15/2018	ND<2	ND<7	ND<8	311	See Lab Report
	AOC4-SV2-15	15	9/15/2018	ND<2	ND<7	ND<8	151	See Lab Report
AOC4-SV3	AOC4-SV3-5	5	2/27/2018	ND<8.0	ND<8.0	ND<40	322	See Lab Report
	AOC4-SV3-15	15	2/27/2018	ND<8.0	ND<8.0	ND<40	448	See Lab Report
	AOC4-SV3-5	5	4/21/2018	ND<8.0	ND<8.0	ND<40	416	See Lab Report
	AOC4-SV3-5 REP	5	4/21/2018	ND<8.0	ND<8.0	ND<40	455	See Lab Report
	AOC4-SV3-15	15	4/21/2018	ND<8.0	ND<8.0	ND<40	489	See Lab Report
AOC4-SV3	AOC4-SV3-5	5	9/15/2018	ND<2	ND<7	ND<8	728	See Lab Report
	AOC4-SV3-15	15	9/15/2018	ND<2	ND<7	ND<8	491	See Lab Report
AOC4-SV4	AOC4-SV4-5	5	2/27/2018	ND<8.0	ND<8.0	ND<40	118	See Lab Report
10015)/5	AOC4-SV4-15	15	2/27/2018	ND<8.0	ND<8.0	ND<40	179	See Lab Report
AOC4-SV5	AOC4-SV5-5 AOC4-SV5-15	5 15	2/27/2018 2/27/2018	ND<8.0 ND<8.0	ND<8.0 ND<8.0	ND<40 ND<40	ND<8.0	See Lab Report
AOC4-SV5	AOC4-SV5-15	5	1/3/2019	ND<8.0	ND<8.0	ND<40	11 15	See Lab Report See Lab Report
A0C4-3V3	AOC4-SV5-15	15	1/3/2019	ND<8.0	ND<8.0	ND<40	11	See Lab Report
AOC4-SV6	AOC4-SV6-5	5	4/21/2018	ND<8.0	ND<8.0	ND<40	93	See Lab Report
7004 340	AOC4-SV6-15	15	4/21/2018	ND<8.0	ND<8.0	ND<40	147	See Lab Report
AOC4-SV6	AOC4-SV6-5	5	9/15/2018	ND<2	8 J	ND<8	196	See Lab Report
	AOC4-SV6-15	15	9/15/2018	ND<2	ND<7	15 J	174	See Lab Report
AOC4-SV8	AOC4-SV8-5	5	4/21/2018	ND<8.0	ND<8.0	ND<40	265	See Lab Report
	AOC4-SV8-15	15	4/21/2018	ND<8.0	ND<8.0	ND<40	387	See Lab Report
AOC4-SV8	AOC4-SV8-5	5	9/15/2018	ND<2	378	199	494	See Lab Report
	AOC4-SV8-15	15	9/15/2018	7 J	2440	774	458	See Lab Report
AOC4-SV9	AOC4-SV9-5	5	4/21/2018	ND<8.0	ND<8.0	ND<40	144	See Lab Report
	AOC4-SV9-15	15	4/21/2018	ND<8.0	ND<8.0	ND<40	146	See Lab Report
	AOC4-SV9-15 REP	15	4/21/2018	ND<8.0	ND<8.0	ND<40	150	See Lab Report
AOC4-SV9	AOC4-SV9-5	5	9/19/2018	ND<8.0	ND<8.0	ND<40	844	See Lab Report
	AOC4-SV9-15	15	9/19/2018	ND<8.0	ND<8.0	ND<40	680	See Lab Report
AOC4-SV10	AOC4-SV10-5	5	4/21/2018	ND<8.0	ND<8.0	ND<40	473	See Lab Report
A O C 4 C \ (1 C	AOC4-SV10-15	15	4/21/2018	ND<8.0	ND<8.0	ND<40	465	See Lab Report
AOC4-SV10	AOC4-SV10-5	5 15	9/19/2018	ND<8.0	ND<8.0	ND<40	1440	See Lab Report
	AOC4-SV10-15 AOC4-SV10-15REP	15 15	9/19/2018 9/19/2018	ND<8.0 ND<8.0	ND<8.0 ND<8.0	ND<40 ND<40	1110 1070	See Lab Report See Lab Report
	AOC4-SV10-13KEP	5	1/3/2019	ND<8.0	ND<8.0	ND<40	481	See Lab Report
	AOC4-SV10-15	15	1/3/2019	ND<8.0	ND<8.0	ND<40	414	See Lab Report
AOC4-SV11	AOC4-SV11-5	5	5/22/2018	28	ND<8.0	ND<40	296	See Lab Report
	AOC4-SV11-15	15	5/22/2018	ND<8.0	ND<8.0	ND<40	292	See Lab Report
AOC4-SV11	AOC4-SV11-5	5	9/19/2018	ND<8.0	ND<8.0	ND<40	1080	See Lab Report
1	AOC4-SV11-15	15	9/19/2018	ND<8.0	ND<8.0	ND<40	911	See Lab Report

Table 4
Soil Vapor Probe Sampling Analytical Results
LAUSD Reseda High School PEA Equivalent

Sample Location	Sample ID	Depth	Sample Date	Benzene	1,2,4- Trimethylben zene	Napthalene	Tetrachloroethene (PCE)	Other VOCs
Unit	S	ft		ug/m3	ug/m3	ug/m3	ug/m3	
С	urrent Preliminary So	reening L	evel	97	63,000	83	460	
F	uture Preliminary Sc	reening Le	evel	3.2	2,100	2.8	15	
AOC4-SV12	AOC4-SV12-5	5	5/22/2018	ND<8.0	ND<8.0	ND<40	105	See Lab Report
	AOC4-SV12-15	15	5/22/2018	98	ND<8.0	ND<40	183	See Lab Report
AOC4-SV12	AOC4-SV12-5	5	1/3/2019	ND<8.0	ND<8.0	ND<40	36	See Lab Report
	AOC4-SV12-15	15	1/3/2019	ND<8.0	ND<8.0	ND<40	167	See Lab Report
AOC4-SV13	AOC4-SV13-5	5	5/22/2018	16	ND<8.0	ND<40	17	See Lab Report
	AOC4-SV13-5REP	5	5/22/2018	12	ND<8.0	ND<40	18	See Lab Report
	AOC4-SV13-15	15	5/22/2018	ND<8.0	ND<8.0	ND<40	35	See Lab Report
AOC4-SV13	AOC4-SV13-5	5	9/19/2018	ND<8.0	ND<8.0	ND<40	551	See Lab Report
	AOC4-SV13-15	15	9/19/2018	ND<8.0	ND<8.0	ND<40	722	See Lab Report
AOC4-SV14	AOC4-SV14-5	5	9/19/2018	ND<8.0	ND<8.0	ND<40	947	See Lab Report
	AOC4-SV14-15	15	9/19/2018	ND<8.0	9.0	ND<40	984	See Lab Report
AOC4-SV15	AOC4-SV15-5	5	9/15/2018	ND<2	ND<7	ND<8	683	See Lab Report
	AOC4-SV15-5REP	5	9/15/2018	ND<2	ND<7	ND<8	676	See Lab Report
	AOC4-SV15-15	15	9/15/2018	ND<2	ND<7	ND<8	463	See Lab Report
AOC4-SV16	AOC4-SV16-5	5	10/9/2018	0.4 J	1.8	3.0	2.8	See Lab Report
	AOC4-SV16-15	15	10/9/2018	0.4 J	ND<0.2	3.8	9.7	See Lab Report
	AOC4-SV16-15DUP	15	10/9/2018	0.5 J	3.0	3.7	8.7	See Lab Report
	AOC4-SV16-5	5	1/3/2019	ND<4	ND<3	ND<2	9	See Lab Report
	AOC4-SV16-15	15	1/3/2019	ND<4	ND<3	ND<2	15	See Lab Report
	AOC4-SV16-15DUP	15	1/3/2019	ND<4	ND<3	ND<2	13	See Lab Report
AOC4-SV17	AOC4-SV17-5	5	10/9/2018	0.4 J	1.9	3.4	1.7	See Lab Report
	AOC4-SV17-15	15	10/9/2018	0.4 J	1.9	4.0	3.1	See Lab Report
	AOC4-SV17-5	5	1/3/2019	ND<4	ND<3	ND<2	5 J	See Lab Report
	AOC4-SV17-15	15	1/3/2019	ND<4	ND<3	ND<2	ND<4	See Lab Report

Value Exceeds Screening Level

PSL = Preliminary Screening Level; i.e., DTSC (2018) residential SLs, as supplemented by USEPA (2018) residential RSLs Current PSL is residential air PSL divided by DTSC (2011) default attenuation factor of 0.001 for a future residential building Future PSL is residential air PSL divided by USEPA (2015) default attenuation factor of 0.03

Table 5 Sub-Slab Sampling Analytical Results LAUSD Reseda High School PEA Equivalent

Sample Location	Sample ID	Depth	Sample Date	Benzene	m,p- Xylene	o-Xylene	Tetrachloroethene (PCE)	Toluene
Units		ft	1	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Curr	ent Preliminary S	creening	Level	1.9	2,000	2,000	9.2	6,200
Futi	ure Preliminary S	creening	Level	3.2	3,333	3,333	15	10,333
AOC4-SS1	AOC4-SS1	SS	5/22/2018	209	74	22	144	198
	AOC4-SS1	SS	9/19/2018	ND<8.0	ND<8.0	ND<8.0	845	ND<8.0
AOC4-SS2	AOC4-SS2	SS	5/22/2018	38	ND<8.0	ND<8.0	446	45
	AOC4-SS2	SS	9/19/2018	ND<8.0	ND<8.0	ND<8.0	1050	ND<8.0
AOC4-SS3	AOC4-SS3	SS	5/22/2018	80	ND<8.0	ND<8.0	523	62
	AOC4-SS3	SS	9/19/2018	ND<8.0	ND<8.0	ND<8.0	1300	ND
	AOC4-SS3	SS	10/5/2018	ND<3.0	NR	NR	323	NR
	AO4-SS3 REP	SS	10/5/2018	ND<3.0	NR	NR	373	NR
	AOC4-SS3	SS	10/6/2018	ND<3.0	NR	NR	374	NR
	AOC4-SS3	SS	1/3/2019	ND<1.0	NR	NR	245	NR
AOC4-SS4	AOC4-SS4	SS	9/19/2018	ND<8.0	ND<8.0	ND<8.0	757	ND<8.0
AOC4-SS5	AOC4-SS5	SS	9/19/2018	ND<8.0	ND<8.0	ND<8.0	866	ND<8.0
	AOC4-SS5	SS	10/5/2018	ND<3.0	NR	NR	4.0	NR
	AOC4-SS5	SS	10/6/2018	ND<3.0	NR	NR	19	NR
	AOC4-SS5	SS	1/3/2019	ND<1.0	NR	NR	42.6	NR
AOC4-SS6	AOC4-SS6	SS	9/19/2018	NS	NS	NS	NS	NS
AOC4-SS7	AOC4-SS7	SS	9/19/2018	ND<8.0	ND<8.0	ND<8.0	1040	ND<8.0
	AOC4-SS7	SS	10/5/2018	ND<3.0	NR	NR	234	NR
	AOC4-SS7	SS	10/6/2018	ND<3.0	NR	NR	9.0*	NR
	AOC4-SS7	SS	1/3/2019	ND<1.0	NR	NR	122	NR
AOC4-SS8	AOC4-SS8	SS	9/15/2018	ND<2	ND<13	ND<8	566	ND<4
AOC4-SS9	AOC4-SS9	SS	9/15/2018	ND<2	ND<13	ND<8	438	ND<4
AOC4-SS10	AOC4-SS10	SS	9/15/2018	ND<2	ND<13	ND<8	18	ND<4
AOC4-SS11	AOC4-SS11	SS	9/15/2018	ND<2	ND<13	ND<8	73	ND<4
AOC4-SS12	AOC4-SS12	SS	9/15/2018	ND<8.0	ND	ND	109	ND<8.0
	AOC4-SS12	SS	10/5/2018	ND<3.0	NR	NR	89	NR
	AOC4-SS12	SS	10/6/2018	ND<3.0	NR	NR	127	NR
	AOC4-SS12	SS	1/3/2019	ND<1.0	NR	NR	79.6	NR
	AOC4-SS12 DUP	SS	1/3/2019	ND<1.0	NR	NR	85.2	NR

Value Exceeds Screening Level

Derivation of the screening levels is explained in text.

NS - unable to obtain sample due to no flow in probe

NR - analyte not reported.

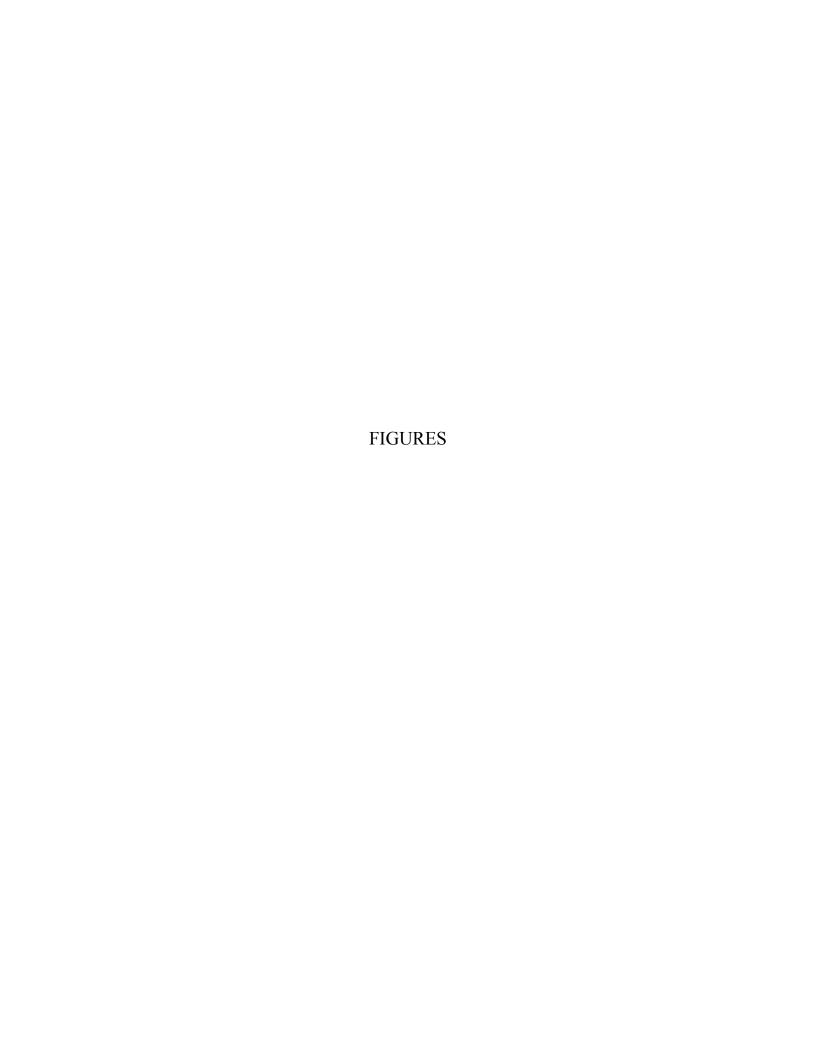
PSL = Preliminary Screening Level; i.e., DTSC (2018) residential SLs, as supplemented by USEPA (2018) residential RSLs Current PSL is residential air PSL divided by DTSC (2011) default attenuation factor of 0.05 residential sub-slab samples Future PSL is residential air PSL divided by USEPA (2015) default attenuation factor of 0.03

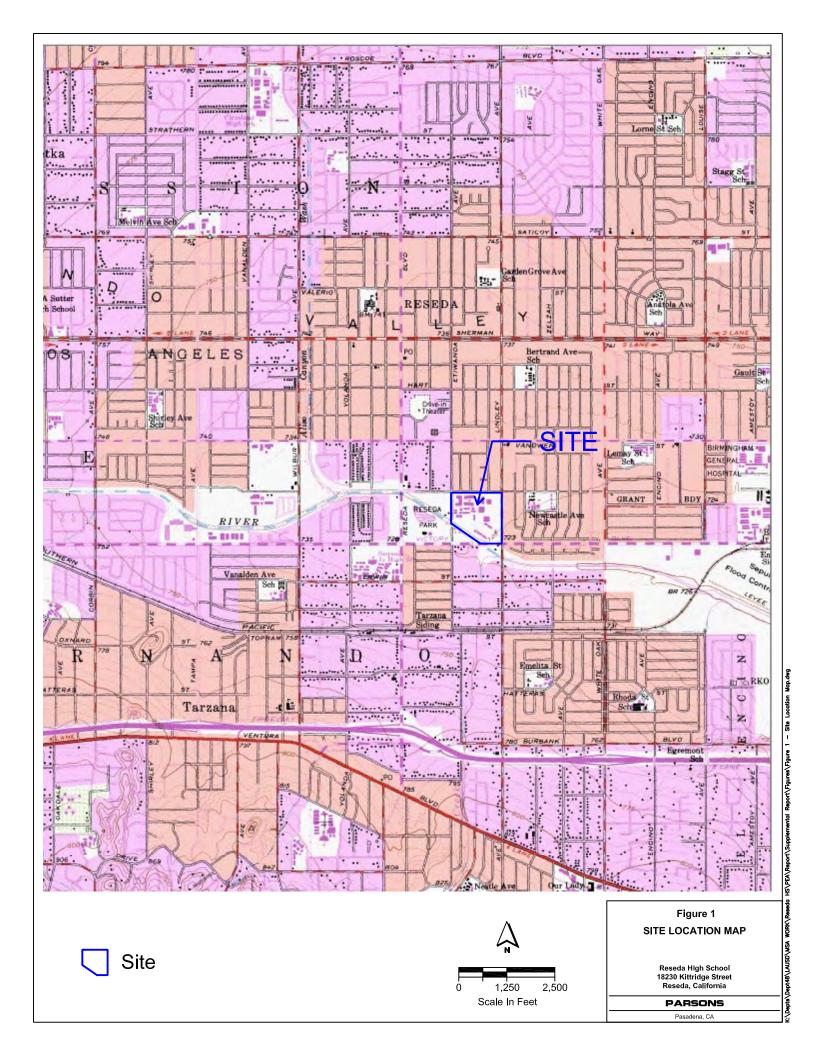
^{* -} tracer gas detected in sample

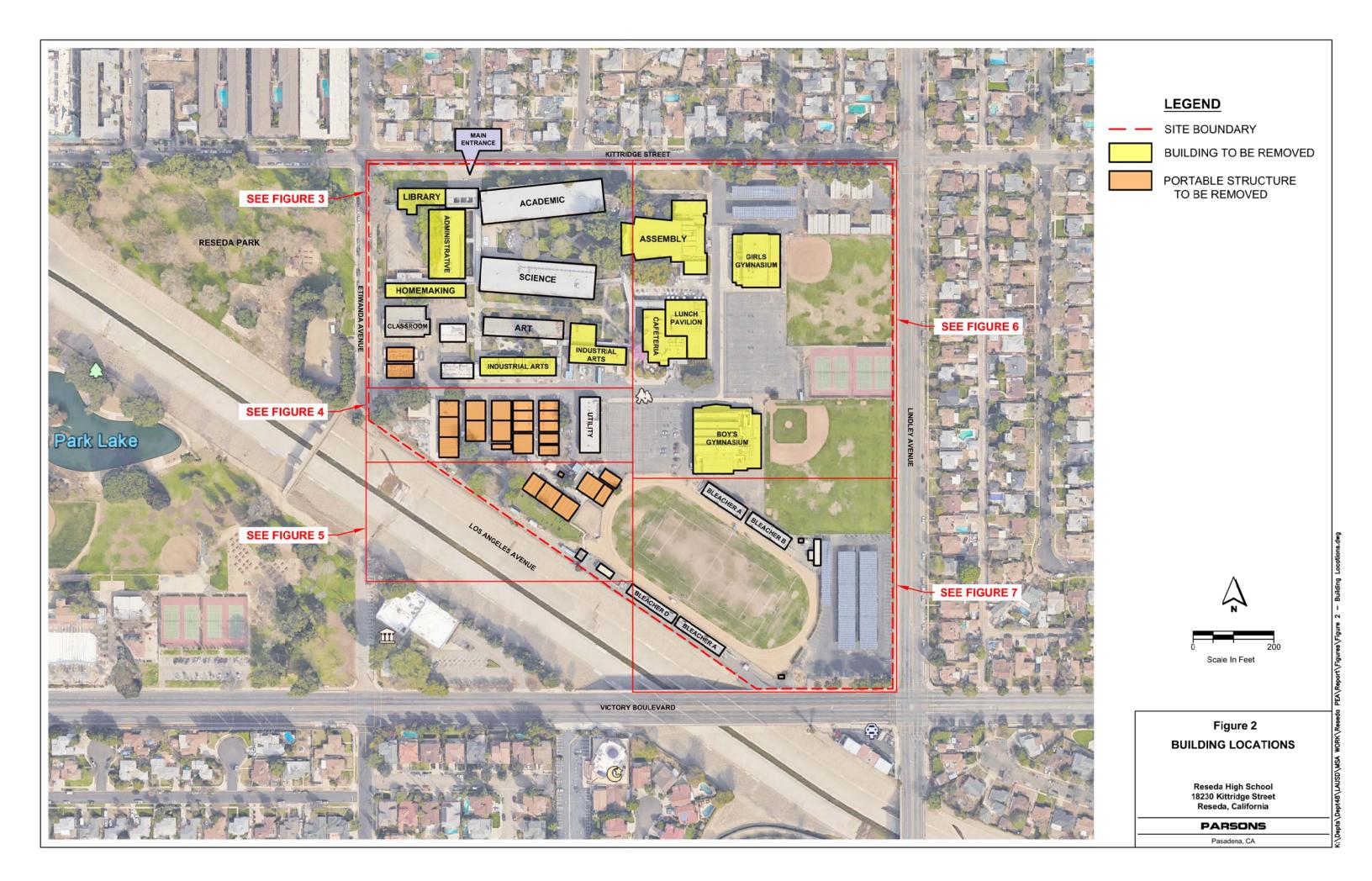
Table 6
Indoor/Outdoor Air Results
LAUSD Reseda High School Supplemental-PEA Equivalent

Sample Location	HVAC	Sample Date	Benzene	Tetrachloroethene (PCE)
Units			ug/m3	ug/m3
Re	sidential PSL		0.097	0.46
Comme	rcial/Industrial PS	L	0.42	2.0
OAS-1	On	10/5/2018	0.38	0.13
	Off	10/6/2018	0.6	0.21
	On	1/3/2019	1.85	ND<0.10
OAS-2	On	10/5/2018	0.43	0.15
	Off	10/6/2018	0.61	0.20
	On	1/3/2019	1.59	ND<0.10
OAS-3	On	10/5/2018	0.42	0.15
	Off	10/6/2018	0.35	0.14
	On	1/3/2019	1.56	ND<0.10
IAS-1	On	10/5/2018	0.45	0.16
	Off	10/6/2018	0.96	0.25
	Off	10/6/2018	0.93	0.26
	On	1/3/2019	2.33	0.13
IAS-2	On	10/5/2018	0.44	0.22
	Off	10/6/2018	0.82	0.23
	On	1/3/2019	1.97	0.19
IAS-3	On	10/5/2018	0.46	0.3
	Off	10/6/2018	0.78	0.39
	On	1/3/2019	1.95	0.20
	On	1/3/2019	1.84	0.20
IAS-4	On	10/5/2018	0.44	0.15
	Off	10/6/2018	1.06	0.26
	On	1/3/2019	1.34	ND<0.10
UT-1		1/3/2019	2.20	0.12
UT-2		1/3/2019	2.04	0.11

PSL = Preliminary Screening Level; i.e., DTSC (2018) residential SLs, as supplemented by USEPA (2018) residential RSLs







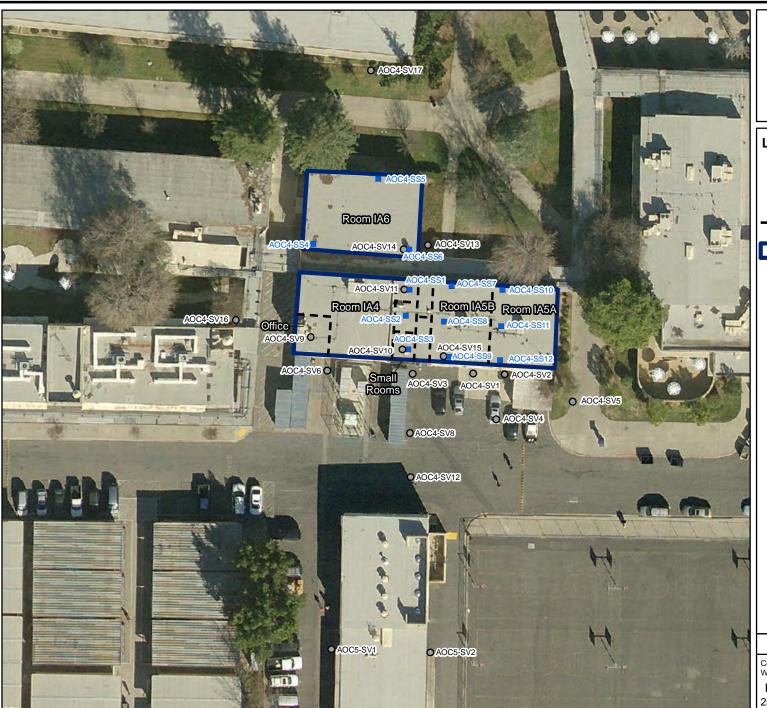


Figure 3 SOIL VAPOR and SUB-SLAB SAMPLING LOCATIONS

Reseda High School 18230 Kittridge Street Reseda, California

LEGEND

- Sub-Slab Soil Vapor Sample Location
- Soil Vapor Sample Location
- ■ Interior Wall
- Building Outline

PARSONS

Coordinate System: WGS 1984 UTM Zone 11N

25 0 25 50

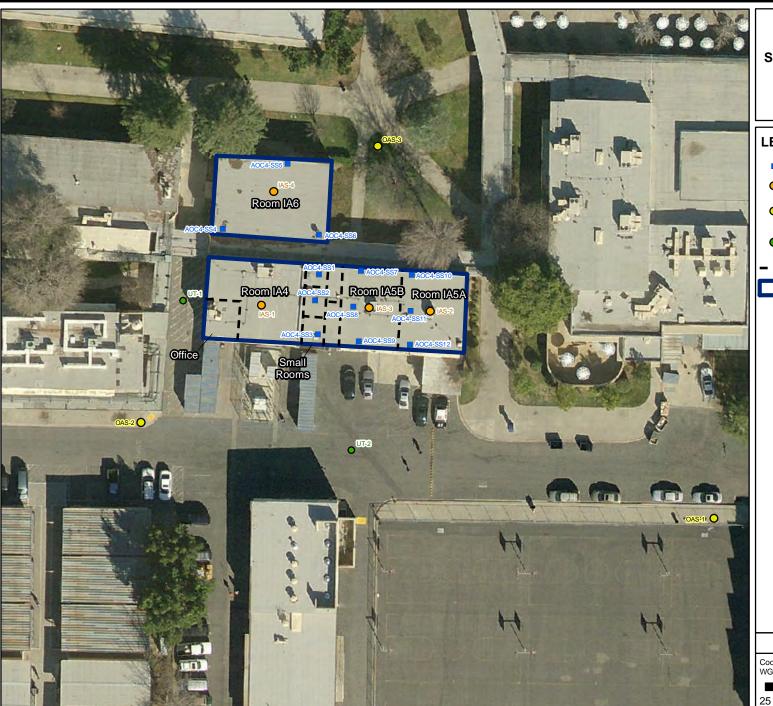


Figure 4 INDOOR/OUTDOOR AIR and **SUB-SLAB SAMPLING LOCATIONS**

Reseda High School 18230 Kittridge Street Reseda, California

LEGEND

- Sub-Slab Soil Vapor Sample Location
- Indoor Air Sampling Location
- Outdoor (Ambient) Air Sampling Location
- Underground Service Tunnel Air Sample Location
- Interior Wall

Building Outline

PARSONS

Coordinate System: WGS 1984 UTM Zone 11N

Feet 0 25 50

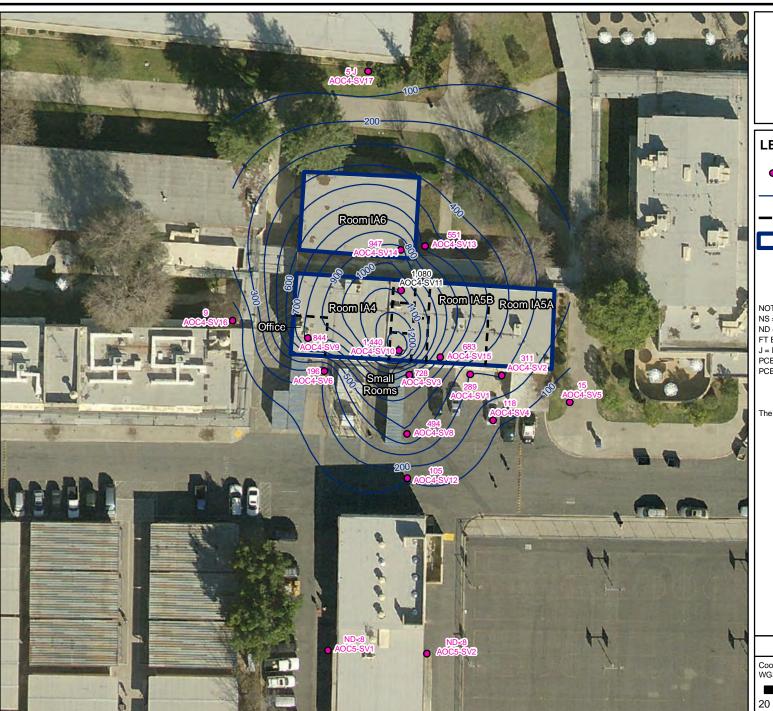


Figure 5 TETRACHLOROETHENE **IN SOIL VAPOR AT 5 FT BGS** (January, 2019)

Reseda High School 18230 Kittridge Street Reseda, California

LEGEND

- Soil Vapor Sample Location
 - PCE Contour (100 ug/m³ contour interval)
- Interior Wall
- **Building Outline**

NS = Not Sampled.

ND = Non-detect at the indicated reporting limit.
FT BGS = Feet Below Ground Surface
J = Estimated value

PCE units = ug/m³

PCE Screening Levels (ug/m³):

	Unrestricted/Residential	Industrial
Current	230	2,000
Future	15	67

The results for the following samples are from the indicated dates:

Sample Location	Sample Date
AOC4-SV1	9/15/2018
AOC4-SV2	9/15/2018
AOC4-SV3	9/15/2018
AOC4-SV4	2/27/2018
AOC4-SV5	1/3/2019
AOC4-SV6	9/15/2018
AOC4-SV8	9/15/2018
AOC4-SV9	9/19/2018
AOC4-SV10	9/19/2018
AOC4-SV11	9/19/2018
AOC4-SV12	5/22/2018
AOC4-SV13	9/19/2018
AOC4-SV14	9/19/2018
AOC4-SV15	9/19/2018
AOC4-SV16	1/3/2019
AOC4-SV17	1/3/2019
AOC5-SV1	1/3/2018
AOC5-SV2	1/3/2018

PARSONS

Coordinate System: WGS 1984 UTM Zone 11N

Feet 0 20 40



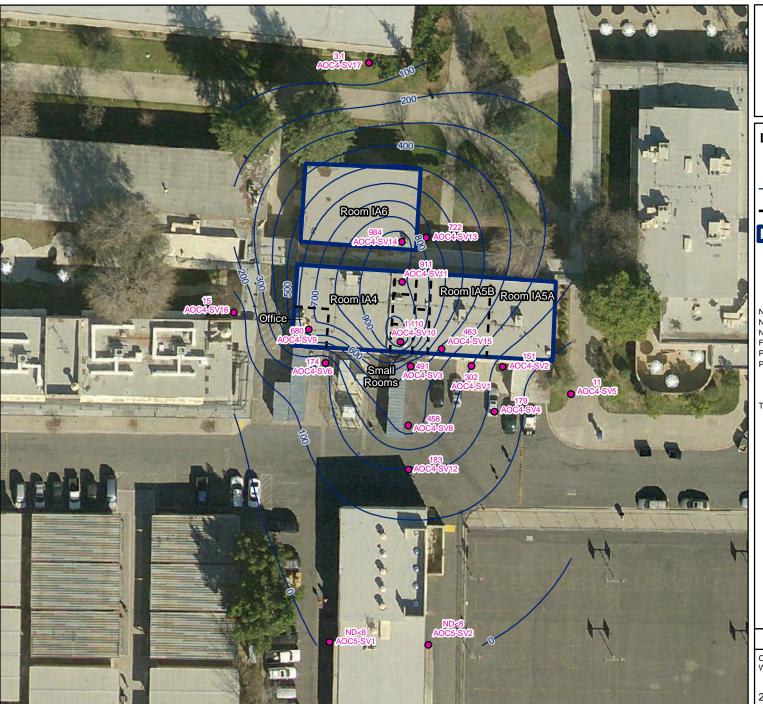


Figure 6 TETRACHLOROETHENE **IN SOIL VAPOR AT 15 FT BGS** (January, 2019)

Reseda High School 18230 Kittridge Street Reseda, California

LEGEND

Soil Vapor Sample Location

PCE Contour (100 ug/m³ contour interval)

Interior Wall

Building Outline

NOTES: NS = Not Sampled.

ND = Non-detect at the indicated reporting limit.
FT BGS = Feet Below Ground Surface
PCE units = ug/m³

PCE Screening Levels (ug/m³):

	Unrestricted/Residential	Industrial
Current	230	2,000
Future	15	67

The results for the following samples are from the indicated dates:

Sample Location	Sample Date
AOC4-SV1	9/15/2018
AOC4-SV2	9/15/2018
AOC4-SV3	9/15/2018
AOC4-SV4	2/27/2018
AOC4-SV5	2/27/2018
AOC4-SV6	9/15/2018
AOC4-SV8	9/15/2018
AOC4-SV9	9/19/2018
AOC4-SV10	9/19/2018
AOC4-SV11	9/19/2018
AOC4-SV12	5/22/2018
AOC4-SV13	9/19/2018
AOC4-SV14	9/19/2018
AOC4-SV15	9/19/2018
AOC4-SV16	1/3/2019
AOC4-SV17	10/9/2018
AOC5-SV1	1/3/2018
AOC5-SV2	1/3/2018

PARSONS

Coordinate System: WGS 1984 UTM Zone 11N



PARSONS Field Boring Log Client/Site: LAUSD Location of Boring/Well: Job No.450810 Reseda High School, Reseda, CA Boring/Well Number See Figure 3 Drilling Co.: Gregg Drilling AOC4-SV14 Drilling Method: Hand auger Sheet Weather Conditions: Sunny/Dry 1 of 1 Geologist: P. Shair Drilling Surface Conditions: Asphalt 4" Start Finish Date Date 9/10/18 9/10/18 Reviewed By: Sample No. Inches Driven **USCS Soil Type** Sampler Blows Instrument: Notes: 8-inches of concrete Depth in Feet Time Time Breathing Zone Time Sample 8:15AM 3:00PM Auger Sample Depth SAND, clean backfill, AF sand. AF 3 4 Clayey SILT, dark yellowish brown (10YR 3/6), moderatly loose, moist. 5 Х 6_ Type of Instrument/Serial No. Calibration Date/Gas: 8 Same as above, brown (10YR 4/3), 15-20% fine grained sand. ML9 10_ 11 12 Same as above, increasing clay. 13 Silty CLAY, dark yellowish brown (10YR 3/4), medium plasticity when Sample Container: 14 Sample Analyses: wet, moist. CL 15_ Х TD 16 17 18 Personal Sampling: 19 Person Sampled: 20_

PARSONS Field Boring Log Client/Site: LAUSD Location of Boring/Well: Job No.450810 Reseda High School, Reseda, CA See Figure 3 Boring/Well Number Drilling Co.: Gregg Drilling AOC4-SV15 Drilling Method: Hand auger Sheet Weather Conditions: Sunny/Dry 1 of 1 Geologist: P. Shair Drilling Surface Conditions: Asphalt 4" Start Finish Date Date 9/10/18 9/10/18 Reviewed By: Sample No. Inches Driven **USCS Soil Type** Sampler Blows Instrument: Notes: 8-inches of concrete Depth in Feet Time Time Breathing Zone Time Sample 8:15AM 11:00AM Auger Sample Depth SILT 3_ ML 5__ SILT, dark grayish brown (10YR 4/2), 25% fine grained sand, 10-15% clay, Х moderately dense, moist. 6 Type of Instrument/Serial No. Calibration Date/Gas: Silty SAND, brown (10YR 4/3), 75% fine grained sand, moderately dense, moist. SM 8 9_ Sandy SILT, dark yellowish brown (10YR 4/4), 20% fine grained sand, 10-15% clay, moderately dense, moist. 10 11_ Clayey SILT, dark yellowish brown (10YR 3/6), 30-40% clay, 10-15% fine 12 ML grained sand, moderately dense, moist. 13 Sample Container: 14 Sample Analyses: 15_ Х TD 16 17 18 Personal Sampling: 19 Person Sampled: 20

Field Boring Log **PARSONS** Client/Site: LAUSD Location of Boring/Well: Job No.450810 Reseda High School, Reseda, CA See Figure 3 Boring/Well Number Drilling Co.: Gregg Drilling AOC4-SV16 Drilling Method: Hand auger Sheet Weather Conditions: Sunny/Dry 1 of 1 Geologist: P. Shair Drilling Surface Conditions: dirt Start Finish Date Date 10/6/18 10/6/18 Reviewed By: **USCS Soil Type** Sample No. Inches Driven Sampler Blows Instrument: Notes: Depth in Feet Time Time Breathing Zone Time Sample 10:10AM 11:00AM Auger Sample Depth 1_ Silty SAND, light brown, fine grained sand, moist, loose. 3 5 ____ 10:24 Х SM Type of Instrument/Serial No. Calibration Date/Gas: 8_ 9_ 10 11_ 12 13 Sandy SILT, brown, fine grained sand, moist, dense, caliche. Sample Container: 14__ Sample Analyses: ML 15_ 10:45 X TD 16 18 Personal Sampling: 19 Person Sampled: 20

Field Boring Log **PARSONS** Client/Site: LAUSD Location of Boring/Well: Job No.450810 Reseda High School, Reseda, CA Boring/Well Number See Figure 3 Drilling Co.: Gregg Drilling AOC4-SV17 Drilling Method: Hand auger Sheet Weather Conditions: Sunny/Dry 1 of 1 Geologist: P. Shair Drilling Surface Conditions: dirt Start Finish Date Date 10/6/18 10/6/18 Reviewed By: **USCS Soil Type** Sample No. Inches Driven Sampler Blows Instrument: Notes: Depth in Feet Time Time Breathing Zone Time Sample 08:20AM 10:00AM Auger Sample Depth 0 Silty SAND, gray brown, trace gravel to 2", dry, loose. 3 5 ____ SM Same as above, with roots, moist. 8:47 Х Type of Instrument/Serial No. Calibration Date/Gas: 8 9_ 10_ SILT, brown, few sand, moist, dense, caliche. 11_ ML 12 13 Sandy SILT with clay, light brown, moist, dense, trace caliche. Sample Container: 14__ Sample Analyses: ML 15_ 9:06 Х TD 16 18 Personal Sampling: 19 Person Sampled: 20



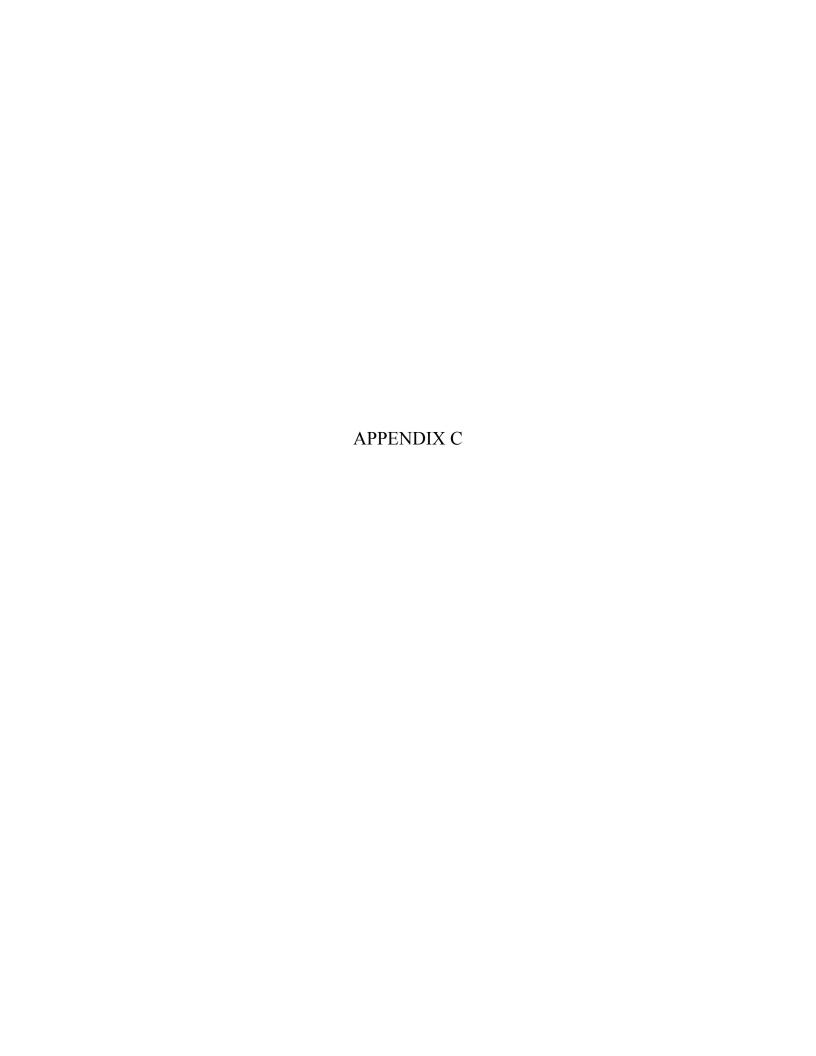
Date 10/5/18

1330	1230	1200	Moo	1050	N aleyo	V 0000	V 920	Time W	
Str (OGMP)+	SE@ Smpt	Mochane	rest OsmpH	Westerpit	NW & Zaph	NEG 2 mph	MNG 3mph	Wind Direction	
nocherse	nochere	nocuse	Lest Osmalt moved 30xsor , JOHE	As inapped	As encipped	As majored	As own pped	OAS -1 location	
no char	Pochera	no chese	Sime as noch	sue as nucl	moved to corner of this - SW	As mapped	As imapped	OAS-2 location	
la Chac	no chare	nochase	As regard	11000 50	As malked	As majored	As unsplaced	OAS-3 location	

Time	Wind Direction	OAS -1 location	OAS-2 location	OAS-3 location
0700)	SE @ 2 andr	As located and official (OK	Astratal and of day 10/5	of the factor of the
0900	SE @ 3 mon	San	San	\
0000	SICES mph	Sam	Same	San
(060	55W GZ m/dn	Same	Saga	Stare
0011	SSW G Sough	Stille	Salve	Same
17.00	SSV a Smph	Tane	Share	72.25
1500	95W a 8 mph	Ja ja	Sime	ONING
400	SSW & suph	Sen	Sand	37.128

Date 1-3-18

Time	Wind Direction	OAS-1 location	OAS-2 location	
0700	3 MOHNINE	Asmugaed	50,000 00	3.5
080	3N:NHM 1		1,	
0000	3 MPH S: SW		11	
1000	4MPH W	,	4	
1100		£	**	
1200	SMPH W		**	
1300	7MPHW	1.1	Ą	
1400	3mp Hu	\- \- \- \- \- \- \- \- \- \- \- \- \- \	!	
1500	HMOHN	11 -11	4	



	Manifest		SOIL SA No	n-Hazar			23 I		V Man	ifest# V	y
	Date of Shipment:	Responsible for	Payment:	Transpor	t Truck #		Facility #:		Approval Num	ber:	Load #
	11126118	,		137	870	/ 5	A07		48582		DOB
	Generator's Name and Billing				1	tor's Phone					
	L.A.U.S.D OEH	S :				-241-310 to Contact:	99		**.		
	333 S. BEAUDRY		OOR		T CISON	to contact.					
	LOS ANGELES, (CA 90017			FAX#:				Customer Acco	unt Number	
	Consultant's Name and Billing	Address:	an maan a kanama ka ka maan ka		Consu	tant's Phone	- #•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	Constitution is traine and bining	3 Address.			Consu	tant 31 non	- 11+				
					Person	to Contact:					
					FAX#:				Customer Acco	unt Number	
	Generation Site (Transport fro	m): (name & address)			Site Ph	one #:	ALMERICA BUTTON ART TO A CONTRACT OF THE STATE OF THE STA				÷
	LAUSD - RESEDA H				Person	to Contact:					
Generator and/or Consultant	18230 KITTRIDGE S RESEDA, CA 9133				FAX#:						
nsu	1 the fact for body 1 to 1 to 1 to 1 to 1 to 1				TAA#.						·
ပို	Designated Facility (Transport	to): (name & address)			1 1	Phone #:					
Q/O	SOIL SAFE					0) 862-8to Contact;	001		<u> </u>		-
ran	12328 HIBISCUS		•		1	E PROV	ANSAL				
rato	ADELANTO, CA	92301			FAX#:						
ene	Transporter Name and Mailin	Transporter Name and Mailing Address: Transporter's Phone #:									
U	•	g Address.	•		1 -	1-460-52			CA	R000183	g13
	BELSHIRE 25971 TOWNE C	ENTRE DRIVE				to Contact;			4.50p3.47		
	FOOTHILL RANC				FAX#:	RY MO	OTHART		450847 Customer Account Number		
			BESI: 20900	95	946	-460-52	10				
	Description of Soil	Moisture Content	Contaminated	by: Appro	ox. Qty:	Descrip	tion of Deliv	/ery	Gross Weight	Tare Weight	Net Weight
	Sand 🗆 Organic 🗅 Clay 🗅 Other 🗅	0 - 10% □ 10 - 20% □ 20% - over □	Diesel [- <i>60</i>	\ DM		50.1		37 <i>70</i> 6	37100	600
	Sand Organic	0 - 10% □ 10 - 20% □			,						.30
	Clay Other Clay Clay I Other Clay Clay Clay Clay Clay Clay Clay Clay	20% - over □ ed above:	Other [Se	cale Ticket #		148	340	
			Υ. σ. Α.Τ	-1 11:1	£	- 1 l l	a taleasa asatis	uales fua			las Soil Data
	Generator's and/or consul Sheet completed and certif in any way.	tant's certification: fied by me/us for th	e Generation Si	it ine soii ite shown	above a	ea nerein i nd nothins	g has been a	idded oi	done to such	soil that w	ould alter it
		erator Consu	Itant O	f., Si	gnature a	4.1	10pm	,			Day Year
_	Transporter's certification								is being delive	TO THE RESERVE THE PARTY OF THE	
Transporter	condition as when receive without off-loading, addin	d. I/We further cer	tify that the soi	il is being	directly	ı transport	ted from the	e Gener	ation Site to t	he Designa	ited Facility
ans	Print or Type Name:				gnaturé a		7			Month	
F		10m42 150	<u> </u>				/-/				09 18
ıty	Discrepancies:				1						
Facil											140
Recycling Facility	Recycling Facility certifies	the receipt of the s	oil covered bu th	his manif	est excer	t as noted	above.				
cyc	Print or Type Name:				gnature a						. ,
Re	18230Kit J.F	PROVANSAL							11.6	06-1	18
Pleas	se print or type:				/		717	Ì.			



Room IA4

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: Justin King Affiliation: Pursu >	Date/Time Prepared: 10-4-18/06: 50 Phone Number: 310-804-579:
Affiliation: FCC>U >	Phone Number: 310-804-5793
Occupant Information	Davis TAM
Occupant Name: Kennely High Sch	al Pauly Interviewed: Yes No
Mailing Address: 18230 Kittobe St	Constitution of the con-
City: State: Co	Zip Code:
Phone: Email:	
Owner/Landlord Information (Check if same as occupant	
Occupant Name:	Interviewed: Yes No
Mailing Address:	
City: State:	Zip Code:
City: State: Phone: Email:	
Building Type (Check appropriate boxes)	
☐ Residential ☐ Residential Duplex ☐ Apartment Building	g ☐ Mobile Home ☐ Commercial (office)
🔀 Commercial (warehouse) 🛘 Industrial 🗘 Strip Mall 🔻	Split Level Church School
Building Characteristics	
	A. 7. 120 C
Approximate Building Age (years): 60 40> Nu. Approximate Building Area (square feet): 2,925 2,00	mber of Stories:
Approximate Building Area (square feet): 2,925 2,0	Number of Elevators:O
Foundation Type (Check appropriate boxes)	
□/Slab-on-Grade □ Crawl Space □ Basement	
Basement Characteristics (Check appropriate boxes)	
☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☐ Sump Pump	☐ Concrete Cracks ☐ Floor Drains
Factors Influencing Indoor Air Quality	
s there an attached garage?	☐ Yes ☐ No
s there smoking in the building?	☐ Yes ☐ No
s there new carpet or furniture?	☐ Yes ☑ No Describe:
Have clothes or drapes been recently dry cleaned?	☐ Yes ☑ No Describe:
las painting or staining been done with the last six months?	☐ Yes ☑ No Describe:
las the building been recently remodeled?	☐ Yes ☑ No Describe:
las the building ever had a fire?	☐ Yes ☑ No
s there a hobby or craft area in the building?	Yes No Describe:
s gun cleaner stored in the building?	☐ Yes ☐ No Describe:
s there a fuel oil tank on the property?	☐ Yes ☐ No
s there a septic tank on the property?	☐ Yes ☐ No
las the building been fumigated or sprayed for pests recently	
o any building occupants use solvents at work?	
o any building occupants use solvents at work?	☐ Yes ☑ No Describe:

APPENDIX M - BUILDING SCREENING FORM

	Resecta Room IA4	
eld Investig	ator Jost Date Date	2-18
Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product Potential Volatile Ingredients
6.0	Isopropyl Alconol	Isopropol Alco
0.0	Behr Peep Base	omlisted
0.0	Winder	non listed
0.0	Honey Citrus: Shen Buffer	nonlinel
0.0	Un Kleen Floor and Wall Clearer	Preost pareline
0.0	Liquid Hard Soap	none listed
0.0	NRA Match Grobe Pellets	
0.0	Diabdo Basic Pellets	
0.0	Home Select Fanish Polish	

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name:	□ No
Occupant Name:	□ No
State:	□ No
City:	□ No
Phone: Email:	□ No
Owner/Landlord Information (Check if same as occupant) Occupant Name:	□ No
Occupant Name:	
Mailing Address: City:	
Mailing Address: City:	
City:	
Phone: Email:	
□ Residential □ Residential Duplex □ Apartment Building □ Mobile Home □ Commercial (of □ Commercial (warehouse) □ Industrial □ Strip Mall □ Split Level □ Church ☑ School Building Characteristics Approximate Building Age (years): Number of Stories: Approximate Building Area (square feet): Number of Elevators: Foundation Type (Check appropriate boxes) ☑ Slab-on-Grade □ Crawl Space □ Basement Basement Characteristics (Check appropriate boxes) □ Dirt Floor ☑ Sealed □ Wet Surfaces □ Sump Pump □ Concrete Cracks □ Floor Drains Factors Influencing Indoor Air Quality Is there an attached garage? □ Yes ☑ No	office)
□ Commercial (warehouse) □ Industrial □ Strip Mall □ Split Level □ Church ☑ School Building Characteristics Approximate Building Age (years): Number of Stories: Approximate Building Area (square feet): Number of Elevators: Foundation Type (Check appropriate boxes) ☑ Slab-on-Grade □ Crawl Space □ Basement Basement Characteristics (Check appropriate boxes) □ Dirt Floor ☑ Sealed □ Wet Surfaces □ Sump Pump □ Concrete Cracks □ Floor Drains Factors Influencing Indoor Air Quality Is there an attached garage? □ Yes ☑ No	office)
Foundation Type (Check appropriate boxes) Slab-on-Grade	
Foundation Type (Check appropriate boxes) Slab-on-Grade	
Foundation Type (Check appropriate boxes) Slab-on-Grade	
☑ Slab-on-Grade ☐ Crawl Space ☐ Basement Basement Characteristics (Check appropriate boxes) ☐ Dirt Floor ☑ Sealed ☐ Wet Surfaces ☐ Sump Pump ☐ Concrete Cracks ☐ Floor Drains Factors Influencing Indoor Air Quality Is there an attached garage? ☐ Yes ☑ No	
☑ Slab-on-Grade ☐ Crawl Space ☐ Basement Basement Characteristics (Check appropriate boxes) ☐ Dirt Floor ☑ Sealed ☐ Wet Surfaces ☐ Sump Pump ☐ Concrete Cracks ☐ Floor Drains Factors Influencing Indoor Air Quality Is there an attached garage? ☐ Yes ☑ No	
Basement Characteristics (Check appropriate boxes) □ Dirt Floor ☑ Sealed □ Wet Surfaces □ Sump Pump □ Concrete Cracks □ Floor Drains Factors Influencing Indoor Air Quality Is there an attached garage? □ Yes ☑ No	
□ Dirt Floor ☑ Sealed □ Wet Surfaces □ Sump Pump □ Concrete Cracks □ Floor Drains Factors Influencing Indoor Air Quality Is there an attached garage? □ Yes ☑ No	
Factors Influencing Indoor Air Quality Is there an attached garage? □ Yes ☑ No	
ls there an attached garage? ☐ Yes ☑ No	
Is there an attached garage?	
s there smoking in the building?	
A THORSE OF THE MAN AND THE STATE OF THE STA	
Is there new carpet or furniture?	
Have clothes or drapes been recently dry cleaned?	
Has painting or staining been done with the last six months?	
Has the building been recently remodeled?	
Has the building ever had a fire? ☐ Yes ☐ No	
s there a hobby or craft area in the building?	
s gun cleaner stored in the building?	
s there a fuel oil tank on the property?	
s there a septic tank on the property?	
Has the building been fumigated or sprayed for pests recently? Yes No Describe:	
Do any building occupants use solvents at work?	-

APPENDIX M - BUILDING SCREENING FORM

dress	18230 Kittindge St	
у	23eda	
	tor	0-2-18
Field nstrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product Potential Volatile Ingredients
	No products in Room	

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: Justin King Affiliation: Corsons	Date/Time Prepared: 10-4-18 /06				
Affiliation: Parsons	Phone Number: 310-801-5763				
Occupant Information					
나 보고 있는데 그렇게 가지 않는 것 같다. 그 나무는 이 전에 되었다.	1 - 2				
Occupant Name: Reseda High Schal Room. Mailing Address: 18230 Kittridge St City: State: Ca Phone: Empile	THSIS Interviewed: Yes No				
Mailing Address: 18230 Kithridee St					
City: Keseda State: Can	Zip Code:				
Phone: Email:					
Owner/Landlord Information (Check if same as occupant 🗵	7				
Occupant Name:	Interviewed: ☐ Yes ☐ No				
Mailing Address:					
City: State:	Zin Code:				
Phone: Email:	zip 0000.				
Building Type (Check appropriate boxes)					
☐ Residential ☐ Residential Duplex ☐ Apartment Building	☐ Mobile Home ☐ Commorcial (office)				
☐ Commercial (warehouse) ☐ Industrial ☐ Strip Mall ☐ S	plit Level Church School				
Building Characteristics					
Approximate Building Age (years): 60405 Numb	per of Stories:				
Approximate Building Age (years): 66475 Numb	Number of Elevators:				
Foundation Type (Check appropriate boxes)					
☑ Slab-on-Grade □ Crawl Space □ Basement					
Basement Characteristics (Check appropriate boxes)					
☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☐ Sump Pump ☐	Concrete Cracks				
actors Influencing Indoor Air Quality					
s there an attached garage?					
/ - 이 마리마리 (1.5 P. M. A. P. M. C. M. M. T. J. M. T. M. T. M.	☐ Yes ☐ No				
striere smoking in the building?	☐ Yes ☐ No				
30.100 July 2007 C. 100 July 2007 (100 July 2007 100 July	☐ Yes ☐ No				
there new carpet or furniture?	☐ Yes ☐ No ☐ Yes ☐ No Describe:				
s there new carpet or furniture? lave clothes or drapes been recently dry cleaned?	☐ Yes ☐ No ☐ Yes ☑ No Describe: ☐ Yes ☑ No Describe:				
s there new carpet or furniture? lave clothes or drapes been recently dry cleaned? las painting or staining been done with the last six months?	☐ Yes ☐ No ☐ Yes ☐ No Describe: ☐ Yes ☐ No Describe: ☐ Yes ☐ No Describe:				
s there new carpet or furniture? lave clothes or drapes been recently dry cleaned? las painting or staining been done with the last six months? las the building been recently remodeled?	Yes No Describe:				
s there new carpet or furniture? Have clothes or drapes been recently dry cleaned? Has painting or staining been done with the last six months? Has the building been recently remodeled? Has the building ever had a fire?	Yes No Describe:				
s there new carpet or furniture? lave clothes or drapes been recently dry cleaned? las painting or staining been done with the last six months? las the building been recently remodeled? las the building ever had a fire? s there a hobby or craft area in the building?	Yes No Describe:				
s there new carpet or furniture? lave clothes or drapes been recently dry cleaned? las painting or staining been done with the last six months? las the building been recently remodeled? las the building ever had a fire? s there a hobby or craft area in the building? s gun cleaner stored in the building?	Yes No Describe:				
s there new carpet or furniture? Have clothes or drapes been recently dry cleaned? Has painting or staining been done with the last six months? Has the building been recently remodeled? Has the building ever had a fire? Has there a hobby or craft area in the building? Has there a fuel oil tank on the property?	Yes No Describe:				
s there smoking in the building? s there new carpet or furniture? dave clothes or drapes been recently dry cleaned? das painting or staining been done with the last six months? das the building been recently remodeled? das the building ever had a fire? s there a hobby or craft area in the building? s gun cleaner stored in the building? s there a fuel oil tank on the property? s there a septic tank on the property? las the building been fumigated or sprayed for pests recently?	Yes No Describe:				

APPENDIX M - BUILDING SCREENING FORM

ld Investiga	ator Justin kis Date 10	2-7-16
Field nstrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients
0	Ghostly For Solution	none listed
0	Elmers blue	pone lold
0	Elever Mountele rubber cont	Visit Control of the
0	Helmanin Clar Gloss	here, propere
0	Boardwork Hang Dully ofoss cleaner	n-hertene Acom, propose butne, hyterorbon Solun's propose, Etistice glacel be etist, Ethers, n-butne
0	Old English Firmiture Polish	none listed
0	Pleage	pone listed
()	400	nonelistal
0	Haggety Silver Four	none listel
()	hoardwelk Disinfecty oupes	Done listed
0	Rustolium multipurpose paint	,
0	Tonor Cartridges	nonelinal
0	Conk Silicone spray	petrolin dut 1/04
0	Rubber Roller Clearer (Martin Yale)	2-but 10 xy Etimel petrous oshlore (nophr) 1-melas-2-paganol, Heylare
	The raine deliver of with forey	t-mellan- L-pagenel, Heylane
		1

APPENDIX L - BUILDING SURVEY FORM

Affiliation: 1054 king	Date/Time Prepared: 10-4-18 Phone Number:
Occupant Information	TA6
Occupant Name: Reseden High School Re Mailing Address: 18230 Attridge St City: Reseden State: Co	Interviewed: Yes No
Mailing Address: 18230 Attridge St	
City: Kesede State: Ca	Zip Code:
Phone: Email:	
Owner/Landlord Information (Check if same as occupant	
Occupant Name:	Interviewed: ☐ Yes ☐ No
Mailing Address:	
City: State:	Zip Code:
Phone: Email:	
Building Type (Check appropriate boxes)	
☐ Residential ☐ Residential Duplex ☐ Apartment Building	
☐ Commercial (warehouse) ☐ Industrial ☐ Strip Mall ☐ S	Split Level Church School
Building Characteristics	
Approximate Building Age (vegra): 60 VES Num	han of Ctarles
Approximate Building Age (years): 60 475 Numl Approximate Building Area (square feet): 2400	Der of Stories:
Approximate building Area (square leet)	_ Number of Elevators:
Foundation Type (Check appropriate boxes)	
Touridation Type (Check appropriate boxes)	
☑ Slab-on-Grade ☐ Crawl Space ☐ Basement	
- 34.00 m. (c) and class class control (4.00 c) control (4.00 c)	
Basement Characteristics (Check appropriate boxes)	
□ Dirt Floor □ Sealed □ Wet Surfaces □ Sump Pump □	Concrete Cracks Floor Drains
Factors Influencing Indoor Air Quality	
s there an attached careas?	□ Vac □ Ma
s there an attached garage? s there smoking in the building?	☐ Yes ☐ No
지역 (, 스레이트) : () - (
s there new carpet or furniture?	☐ Yes ☐ No Describe:
lave clothes or drapes been recently dry cleaned?	☐ Yes ☐ No Describe:
las painting or staining been done with the last six months?	☐ Yes ☐ No Describe:
las the building been recently remodeled?	☐ Yes ☑ No Describe:
las the building ever had a fire?	☐ Yes ☑ No
s there a hobby or craft area in the building?	Tyes No Describe: Science ra
s gun cleaner stored in the building?	☐ Yes ☐ No
s there a fuel oil tank on the property?	☐ Yes ☑ No
s there a septic tank on the property?	☐ Yes ☐ No
las the building been fumigated or sprayed for pests recently?	CONTRACTOR OF THE PROPERTY OF
o any building occupants use solvents at work?	☐ Yes ☐ No Describe: ☐ Yes

APPENDIX M - BUILDING SCREENING FORM

Occupant of B	wilding Reseden High School	1	l 00+	n IA6
Address	18230 Kittridge St.			
City	esede			
Field Investiga	tor_ Justin King	_ Date _	10-4	'-18
Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consu	ımer Produc		f Consumer Product, Potential Volatile Ingredients
	Land Proposal I sa			

Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients
	Lysul Disenfection Sprang	nonelisted
	Hach hate isoll Test kits	Dane lisked
	Phosphite test solution	·- •
	Clove oil	× - 1;
	Toluridine Blue Buffer Solution	>- I.
	Bromobentene contarer	Bromobenzae
	Pancreatin Enzyme	none listed
	Potassium Chronote	**
	Potassium Hydoxide	×- +,
	Phosphate Buffer Solution	¢ - ¢ -
	Isoproply Alecand	
	Pepsin	none listed
	Benchit's Quelicharic Solution	·
	Potossium Rermanganete	4
	Nitre Acid	I NEW TWO
	Indopheral	* - 1 7
	Hydro Chloril Acid	- 5 .

mments:		

October 2011 DTSC – Cal/EPA

APPENDIX M - BUILDING SCREENING FORM

y}	8230 kittridge St Resêde	
ld Investigat	tor_Jatin king Date_10	14/18
Field estrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients
	Glucose Standre	roneloted
	Ink Eradicator	Poneluted
	Hydrosa Peroxide	×- 4
	Iodine Solution	× × ×)
	Clycerol	
	Coroline Blue	name listed
	Carnoy Fixatic	ethanol
	Calcium sulfate	none like
	Acebre	actere
	Sulfunic Acid	pone lutel retroler-exe
	Chronotagraphy Solvert	retroles-exer Aceta-
	Metravol	
	Tris-Borate-EOTA	Method Tris-hydoxymethica-
	Etracl	Exerol
	Britary	Etrasol Butanal





THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine 17461 Derian Ave Suite 100 Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-219730-1

Client Project/Site: LAUSD Reseda H.S., CA

For:

Parsons Corporation 100 W Walnut Street Pasadena, California 91124

Attn: Justin King

Pagnota

Authorized for release by: 9/18/2018 4:07:57 PM

Patty Mata, Senior Project Manager (949)261-1022

patty.mata@testamericainc.com

..... LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
Surrogate Summary	18
Method Summary	21
Lab Chronicle	22
QC Sample Results	24
QC Association Summary	42
Definitions/Glossary	45
Certification Summary	46
Chain of Custody	47
Receipt Checklists	48

3

4

6

8

9

11

12

14

Sample Summary

Matrix

Solid

Solid

Solid

Solid

Solid

Water

Client: Parsons Corporation

Lab Sample ID

440-219730-1

440-219730-2

440-219730-3

440-219730-4

440-219730-5

440-219730-6

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID

AOC4-SV15-5

AOC4-SV15-15

AOC4-SV15-15D

AOC4-SV14-5

EB-1

AOC4-SV14-15

TestAmerica Job ID: 440-219730-1

Collected	Received
09/10/18 08:10	09/10/18 13:20
09/10/18 09:15	09/10/18 13:20
09/10/18 09:15	09/10/18 13:20
09/10/18 08:30	09/10/18 13:20

09/10/18 11:00

09/10/18 10:30

3

4

5

0

09/10/18 13:20

09/10/18 13:20

8

46

11

13

14

Case Narrative

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Job ID: 440-219730-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative 440-219730-1

Comments

No additional comments.

Receipt

The samples were received on 9/10/2018 1:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

Receipt Exceptions

TB (440-219730-7) was listed on COC but was crossed out. The lab did receive this sample, and logged it in as Hold.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 440-498992 recovered outside control limits for Bromoform. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method(s) 8015B: Surrogate recoveries for the following samples were outside control limits: AOC4-SV14-5 (440-219730-4) and AOC4-SV14-15 (440-219730-5). Re-analysis was performed with concurring results. The re-analysis results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-498584 and analytical batch 440-498686. The laboratory control sample (LCS) was performed in duplicate to provide precision data for the batch.

Method(s) 8015B: The method blank for preparation batch 440-498978 and analytical batch 440-499059 contained C23-C40 above the method detection limit (MDL). This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

3

4

5

6

8

9

11

12

14

Detection Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: AOC4-SV15	5-5					Lat	o Sa	ample ID:	440-219730-
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
ORO (C23-C40)	6.6	В	4.9	2.5	mg/Kg	1	_	8015B	Total/NA
Client Sample ID: AOC4-SV15	5-15					Lak	o Sa	ample ID:	440-219730-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
ORO (C23-C40)	4.3	J B	4.9	2.5	mg/Kg	1	_	8015B	Total/NA
Client Sample ID: AOC4-SV15	i-15D					Lak	o Sa	ample ID:	440-219730-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
ORO (C23-C40)	4.0	J B	4.9	2.5	mg/Kg	1	_	8015B	Total/NA
Client Sample ID: AOC4-SV14	l-5					Lak	o Sa	ample ID:	440-219730-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
ORO (C23-C40)	5.8	В	4.9	2.5	mg/Kg	1	_	8015B	Total/NA
Client Sample ID: AOC4-SV14	l-15					Lak	o Sa	ample ID:	440-219730-
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
ORO (C23-C40)	4.3	JB	4.9	2.5	mg/Kg	1	_	8015B	Total/NA
Client Sample ID: EB-1						Lak	o Sa	ample ID:	440-219730-6
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.28	J	0.50	0.25	ug/L	1	_	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-1

Matrix: Solid

Client Sample ID: AOC4-SV15-5

Date Collected: 09/10/18 08:10 Date Received: 09/10/18 13:20

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	-
Bromobenzene	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Bromochloromethane	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Bromodichloromethane	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Bromoform	ND *	5.1	2.1	ug/Kg		09/10/18 14:26	09/14/18 11:39	
2-Butanone (MEK)	ND	10	5.1	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Carbon tetrachloride	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Chlorobenzene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Chloroethane	ND	5.1	2.1	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Chloroform	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Chloromethane	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
2-Chlorotoluene	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I-Chlorotoluene	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
cis-1,2-Dichloroethene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
cis-1,3-Dichloropropene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Dibromochloromethane	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,2-Dibromo-3-Chloropropane	ND	5.1	2.1	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,2-Dibromoethane (EDB)	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Dibromomethane	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I.2-Dichlorobenzene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I.3-Dichlorobenzene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,4-Dichlorobenzene	ND	2.1		ug/Kg		09/10/18 14:26	09/14/18 11:39	
Dichlorodifluoromethane	ND	5.1	2.1	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,1-Dichloroethane	ND	2.1	1.0	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,2-Dichloroethane	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	· · · · · · .
I,1-Dichloroethene	ND	5.1	1.0	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 11:39	
	ND	2.1	1.0	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,2-Dichloropropane								
I,3-Dichloropropane	ND ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
2,2-Dichloropropane	ND ND	2.1 2.1	1.0	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 11:39 09/14/18 11:39	
I,1-Dichloropropene			1.0			09/10/18 14:26		
Ethylbenzene	ND ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Hexachlorobutadiene	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
sopropylbenzene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Methylene Chloride	ND	21	5.1	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Methyl-t-Butyl Ether (MTBE)	ND	5.1		ug/Kg		09/10/18 14:26	09/14/18 11:39	•
n,p-Xylene	ND ND	4.1		ug/Kg		09/10/18 14:26	09/14/18 11:39	
Naphthalene	ND	5.1		ug/Kg		09/10/18 14:26	09/14/18 11:39	•
n-Butylbenzene	ND	5.1		ug/Kg		09/10/18 14:26	09/14/18 11:39	•
N-Propylbenzene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
p-Xylene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	•
p-Isopropyltoluene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	•
sec-Butylbenzene	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Styrene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	•
ert-Butylbenzene	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
I,1,1,2-Tetrachloroethane	ND	5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
1,1,2,2-Tetrachloroethane	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Tetrachloroethene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	
Гoluene	ND	2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	

TestAmerica Irvine

9/18/2018

3

5

7

9

11

Client Sample Results

Client: Parsons Corporation

Date Collected: 09/10/18 08:10

Date Received: 09/10/18 13:20

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV15-5

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	MD		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,2,3-Trichlorobenzene	ND		5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,2,4-Trichlorobenzene	ND		5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,1,1-Trichloroethane	ND		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,1,2-Trichloroethane	ND		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
Trichloroethene	ND		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
Trichlorofluoromethane	ND		5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,2,3-Trichloropropane	ND		10	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,2,4-Trimethylbenzene	ND		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
1,3,5-Trimethylbenzene	ND		2.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
Vinyl chloride	ND		5.1	1.0	ug/Kg		09/10/18 14:26	09/14/18 11:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		79 - 120				09/10/18 14:26	09/14/18 11:39	1
Dibromofluoromethane (Surr)	115		60 - 120				09/10/18 14:26	09/14/18 11:39	1
Toluene-d8 (Surr)	103		79 - 123				09/10/18 14:26	09/14/18 11:39	1
Method: 8015B - Gasoline Ran	ige Organics - (G	C)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		400	150	ug/Kg			09/14/18 14:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		65 - 140					09/14/18 14:55	

A I4	Method: 8015B - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C13-C22)	ND		4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 13:18	1	
ORO (C23-C40)	6.6	В	4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 13:18	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
n-Octacosane	59		40 - 140				09/14/18 06:01	09/14/18 13:18	1	
		Qualifier								

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Aroclor 1221	ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Aroclor 1232	ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Aroclor 1242	ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Aroclor 1248	ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Aroclor 1254	ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Aroclor 1260	ND	50	17	ug/Kg		09/14/18 06:16	09/17/18 14:35	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)		45 - 120				09/14/18 06:16	09/17/18 14:35	1

Client Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-219730-2

TestAmerica Job ID: 440-219730-1

Matrix: Solid

Client Sample ID: AOC4-SV15-15

Date Collected: 09/10/18 09:15 Date Received: 09/10/18 13:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Bromobenzene	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Bromochloromethane	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Bromodichloromethane	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Bromoform	ND	*	3.8	1.5	ug/Kg		09/10/18 14:26	09/14/18 12:03	
2-Butanone (MEK)	ND		7.5	3.8	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Carbon tetrachloride	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Chlorobenzene	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Chloroethane	ND		3.8	1.5	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Chloroform	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Chloromethane	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
2-Chlorotoluene	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
4-Chlorotoluene	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
cis-1,2-Dichloroethene	ND		1.5	0.75			09/10/18 14:26	09/14/18 12:03	
cis-1,3-Dichloropropene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Dibromochloromethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2-Dibromo-3-Chloropropane	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2-Dibromoethane (EDB)	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Dibromomethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2-Dichlorobenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,3-Dichlorobenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
I,4-Dichlorobenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Dichlorodifluoromethane	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,1-Dichloroethane	ND		1.5		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2-Dichloroethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
I,1-Dichloroethene	ND		3.8		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2-Dichloropropane	ND		1.5		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:03	
	ND		1.5				09/10/18 14:26	09/14/18 12:03	
1,3-Dichloropropane	ND ND		1.5		ug/Kg				
2,2-Dichloropropane	ND ND				ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,1-Dichloropropene			1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Ethylbenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Hexachlorobutadiene 	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
sopropylbenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Methylene Chloride	ND		15		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Methyl-t-Butyl Ether (MTBE)	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
m,p-Xylene	ND		3.0		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Naphthalene	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
n-Butylbenzene	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
N-Propylbenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
o-Xylene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
o-Isopropyltoluene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
sec-Butylbenzene	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Styrene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
ert-Butylbenzene	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,1,1,2-Tetrachloroethane	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,1,2,2-Tetrachloroethane	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Tetrachloroethene	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Toluene	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	

TestAmerica Irvine

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: AOC4-SV15-15 Lab Sample ID: 440-219730-2

Date Collected: 09/10/18 09:15

Date Received: 09/10/18 13:20

Matrix: Solid

	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
trans-1,3-Dichloropropene	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2,3-Trichlorobenzene	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2,4-Trichlorobenzene	ND		3.8	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,1,1-Trichloroethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,1,2-Trichloroethane	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Trichloroethene	ND		1.5	0.75	ug/Kg		09/10/18 14:26	09/14/18 12:03	
Trichlorofluoromethane	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2,3-Trichloropropane	ND		7.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,2,4-Trimethylbenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
1,3,5-Trimethylbenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Vinyl chloride	ND		3.8		ug/Kg		09/10/18 14:26	09/14/18 12:03	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		79 - 120				09/10/18 14:26	09/14/18 12:03	
Dibromofluoromethane (Surr)	113		60 - 120				09/10/18 14:26	09/14/18 12:03	
Toluene-d8 (Surr)	102		79 - 123				09/10/18 14:26	09/14/18 12:03	
Method: 8015B - Gasoline Range Or	•	•				_			D.: E
Analyte		Qualifier	RL	MDL		_ D	Prepared	Analyzed	Dil Fa
GRO (C4-C12)	ND		400	150	ug/Kg			09/14/18 15:23	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	77		65 - 140					09/14/18 15:23	
Method: 8015B - Diesel Range Orga	nics (DRO)	(GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
DRO (C13-C22)	ND		4.0		mg/Kg		00/44/40 00 04		Diria
5110 (510 022)	ND		4.9	2.5	mg/rtg		09/14/18 06:01	09/14/18 16:38	Dilla
,		JB	4.9 4.9		mg/Kg		09/14/18 06:01	09/14/18 16:38 09/14/18 16:38	
ORO (C23-C40)									Dil Fa
ORO (C23-C40) Surrogate	4.3		4.9				09/14/18 06:01	09/14/18 16:38	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane	4.3 %Recovery 64 henyls (PCI	Qualifier Bs) by Gas C	4.9 Limits 40 - 140				09/14/18 06:01 Prepared	09/14/18 16:38 Analyzed	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl	4.3 %Recovery 64 henyls (PCI	Qualifier	4.9 Limits 40 - 140		mg/Kg	D	09/14/18 06:01 Prepared	09/14/18 16:38 Analyzed	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte	4.3 %Recovery 64 henyls (PCI	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography	2.5	mg/Kg	<u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01	09/14/18 16:38 Analyzed 09/14/18 16:38	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016	4.3 %Recovery 64 henyls (PCI Result	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography RL	2.5 MDL	mg/Kg	_ D	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared	09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016 Aroclor 1221	4.3 %Recovery 64 henyls (PCI Result ND	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography RL 49	2.5 MDL 17 17	mg/Kg Unit ug/Kg	_ <u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared 09/14/18 06:16	09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed 09/17/18 14:48	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232	4.3 %Recovery 64 henyls (PCI Result ND ND	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography RL 49 49	2.5 MDL 17 17 17	mg/Kg Unit ug/Kg ug/Kg	<u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared 09/14/18 06:16 09/14/18 06:16	09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed 09/17/18 14:48 09/17/18 14:48	Dil Fa
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242	4.3 %Recovery 64 henyls (PCI Result ND ND ND	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography RL 49 49 49	2.5 MDL 17 17 17 17	Unit ug/Kg ug/Kg ug/Kg	_ <u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16	09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed 09/17/18 14:48 09/17/18 14:48	Dil Fa
Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248	4.3 %Recovery 64 henyls (PCI Result ND ND ND	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography RL 49 49 49 49	2.5 MDL 17 17 17 17 17	Unit ug/Kg ug/Kg ug/Kg ug/Kg	_ <u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16	09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed 09/17/18 14:48 09/17/18 14:48 09/17/18 14:48	Dil F
ORO (C23-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	4.3 %Recovery 64 henyls (PCI Result ND ND ND ND ND ND	Qualifier Bs) by Gas C	4.9 Limits 40 - 140 Chromatography RL 49 49 49 49 49	2.5 MDL 17 17 17 17 17 17	Unit ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	_ <u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16	Analyzed 09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed 09/17/18 14:48 09/17/18 14:48 09/17/18 14:48 09/17/18 14:48	Dil Fa
ORO (C13-C40) Surrogate n-Octacosane Method: 8082 - Polychlorinated Bipl Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Surrogate	4.3 %Recovery 64 henyls (PCI Result ND	Qualifier Bs) by Gas C Qualifier	4.9 Limits 40 - 140 Chromatography RL 49 49 49 49 49 49 49	2.5 MDL 17 17 17 17 17 17	Unit ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	<u>D</u>	09/14/18 06:01 Prepared 09/14/18 06:01 Prepared 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16 09/14/18 06:16	Analyzed 09/14/18 16:38 Analyzed 09/14/18 16:38 Analyzed 09/17/18 14:48 09/17/18 14:48 09/17/18 14:48 09/17/18 14:48 09/17/18 14:48	

3

5

7

9

11

12

14

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-3

Matrix: Solid

Client Sample ID: AOC4-SV15-15D

Date Collected: 09/10/18 09:15 Date Received: 09/10/18 13:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Bromobenzene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Bromochloromethane	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Bromodichloromethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Bromoform	ND	*	4.4	1.7	ug/Kg		09/10/18 14:26	09/14/18 12:27	
2-Butanone (MEK)	ND		8.7	4.4	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Carbon tetrachloride	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Chlorobenzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Chloroethane	ND		4.4	1.7	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Chloroform	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Chloromethane	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
2-Chlorotoluene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1-Chlorotoluene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
cis-1,2-Dichloroethene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
cis-1,3-Dichloropropene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Dibromochloromethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,2-Dibromo-3-Chloropropane	ND		4.4	1.7	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,2-Dibromoethane (EDB)	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Dibromomethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,2-Dichlorobenzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,3-Dichlorobenzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
I,4-Dichlorobenzene	ND		1.7	0.87			09/10/18 14:26	09/14/18 12:27	
Dichlorodifluoromethane	ND		4.4		ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,1-Dichloroethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,2-Dichloroethane	ND		1.7		ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,1-Dichloroethene	ND		4.4	0.87	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:27	
I,2-Dichloropropane	ND		1.7	0.87	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,3-Dichloropropane	ND			0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
2,2-Dichloropropane	ND		1.7	0.87	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,1-Dichloropropene	ND ND		1.7	0.87	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:27	
	ND		1.7	0.87	ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:27	
Ethylbenzene									
Hexachlorobutadiene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
sopropylbenzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Methylene Chloride	ND		17		ug/Kg		09/10/18 14:26	09/14/18 12:27	
Methyl-t-Butyl Ether (MTBE)	ND		4.4		ug/Kg		09/10/18 14:26	09/14/18 12:27	
n,p-Xylene	ND		3.5		ug/Kg		09/10/18 14:26	09/14/18 12:27	
Naphthalene	ND		4.4		ug/Kg		09/10/18 14:26	09/14/18 12:27	
n-Butylbenzene	ND		4.4		ug/Kg		09/10/18 14:26	09/14/18 12:27	
N-Propylbenzene	ND		1.7	0.87			09/10/18 14:26	09/14/18 12:27	
o-Xylene	ND		1.7	0.87			09/10/18 14:26	09/14/18 12:27	
o-Isopropyltoluene	ND		1.7	0.87			09/10/18 14:26	09/14/18 12:27	
sec-Butylbenzene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Styrene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
ert-Butylbenzene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,1,1,2-Tetrachloroethane	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
1,1,2,2-Tetrachloroethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Γetrachloroethene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	
Toluene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	

TestAmerica Irvine

Client: Parsons Corporation

DCB Decachlorobiphenyl (Surr)

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: AOC4-SV15-15D Lab Sample ID: 440-219730-3

Date Collected: 09/10/18 09:15 Matrix: Solid Date Received: 09/10/18 13:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,2,3-Trichlorobenzene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,2,4-Trichlorobenzene	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,1,1-Trichloroethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,1,2-Trichloroethane	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
Trichloroethene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
Trichlorofluoromethane	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,2,3-Trichloropropane	ND		8.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,2,4-Trimethylbenzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
1,3,5-Trimethylbenzene	ND		1.7	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
Vinyl chloride	ND		4.4	0.87	ug/Kg		09/10/18 14:26	09/14/18 12:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		79 - 120				09/10/18 14:26	09/14/18 12:27	1
Dibromofluoromethane (Surr)	115		60 - 120				09/10/18 14:26	09/14/18 12:27	1
Toluene-d8 (Surr)	100		79 - 123				09/10/18 14:26	09/14/18 12:27	1
Method: 8015B - Gasoline Rai	nge Organics - (G	C)							
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND ND		390	150	ug/Kg			09/14/18 15:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67		65 - 140					09/14/18 15:52	1
- Method: 8015B - Diesel Range	e Organics (DRO)	(GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND	·	4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 16:16	1
ORO (C23-C40)	4.0	JB	4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	66		40 - 140				09/14/18 06:01	09/14/18 16:16	
Method: 8082 - Polychlorinate Analyte		Bs) by Gas Qualifier	Chromatograph RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Aroclor 1016	ND NE	Qualifier	49				09/14/18 06:16	09/17/18 15:02	1
	ND ND		49		0 0		09/14/18 06:16	09/17/18 15:02	1
Aroclor 1221 Aroclor 1232	ND ND		49 49	17	0 0		09/14/18 06:16		1
					ug/Kg			09/17/18 15:02	
Aroclor 1242	ND		49		ug/Kg		09/14/18 06:16	09/17/18 15:02	1
Aroclor 1248	ND		49		ug/Kg		09/14/18 06:16	09/17/18 15:02	1
			49	17	ug/Kg		09/14/18 06:16	09/17/18 15:02	1
	ND								
Aroclor 1254 Aroclor 1260	ND ND		49		ug/Kg		09/14/18 06:16	09/17/18 15:02	1
		Qualifier							Dil Fac

45 - 120

Client: Parsons Corporation

Date Received: 09/10/18 13:20

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: AOC4-SV14-5

Lab Sample ID: 440-219730-4 Date Collected: 09/10/18 08:30

Matrix: Solid

Method: 8260B - Volatile Organi Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Bromobenzene	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Bromochloromethane	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Bromodichloromethane	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Bromoform	ND	*	4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
2-Butanone (MEK)	ND		8.2	4.1	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Carbon tetrachloride	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Chlorobenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Chloroethane	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Chloroform	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Chloromethane	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
2-Chlorotoluene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
4-Chlorotoluene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
cis-1,2-Dichloroethene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
cis-1,3-Dichloropropene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Dibromochloromethane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2-Dibromo-3-Chloropropane	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2-Dibromoethane (EDB)	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Dibromomethane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2-Dichlorobenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,3-Dichlorobenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,4-Dichlorobenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Dichlorodifluoromethane	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1-Dichloroethane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2-Dichloroethane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1-Dichloroethene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2-Dichloropropane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,3-Dichloropropane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
2,2-Dichloropropane	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1-Dichloropropene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Ethylbenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Hexachlorobutadiene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Isopropylbenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Methylene Chloride	ND		16		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Methyl-t-Butyl Ether (MTBE)	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
m,p-Xylene	ND		3.3		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Naphthalene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
n-Butylbenzene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
N-Propylbenzene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
o-Xylene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
p-Isopropyltoluene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
sec-Butylbenzene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
Styrene	ND		1.6		ug/Kg		09/10/18 14:26	09/14/18 12:51	
tert-Butylbenzene	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1,1,2-Tetrachloroethane	ND		4.1		ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1,2,2-Tetrachloroethane	ND		1.6		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:51	
Tetrachloroethene	ND		1.6		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:51	
Toluene	ND		1.6		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:51	
trans-1,2-Dichloroethene	ND ND		1.6		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 12:51	

TestAmerica Irvine

Client: Parsons Corporation

Date Received: 09/10/18 13:20

Surrogate

DCB Decachlorobiphenyl (Surr)

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: AOC4-SV14-5 Lab Sample ID: 440-219730-4

Date Collected: 09/10/18 08:30

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
trans-1,3-Dichloropropene	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2,3-Trichlorobenzene	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2,4-Trichlorobenzene	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1,1-Trichloroethane	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,1,2-Trichloroethane	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Trichloroethene	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Trichlorofluoromethane	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2,3-Trichloropropane	ND		8.2	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,2,4-Trimethylbenzene	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
1,3,5-Trimethylbenzene	ND		1.6	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Vinyl chloride	ND		4.1	0.82	ug/Kg		09/10/18 14:26	09/14/18 12:51	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		79 - 120				09/10/18 14:26	09/14/18 12:51	
Dibromofluoromethane (Surr)	116		60 - 120				09/10/18 14:26	09/14/18 12:51	
Toluene-d8 (Surr)	103		79 - 123				09/10/18 14:26	09/14/18 12:51	
Method: 8015B - Gasoline Rai	nge Organics - (G	C)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
GRO (C4-C12)	ND		400	150	ug/Kg			09/14/18 16:21	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	39	X	65 - 140					09/14/18 16:21	
Method: 8015B - Diesel Range	e Organics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
DRO (C13-C22)	ND		4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 17:22	
ORO (C23-C40)	5.8	В	4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 17:22	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
n-Octacosane	71		40 - 140				09/14/18 06:01	09/14/18 17:22	
Method: 8082 - Polychlorinate	ed Biphenyls (PCI	Bs) by Gas	Chromatograph	ıy					
Analyte		Qualifier	RL	-	Unit	D	Prepared	Analyzed	Dil Fa
Aroclor 1016	ND		49	17	ug/Kg		09/14/18 06:16	09/17/18 15:15	
Aroclor 1221	ND		49	17	ug/Kg		09/14/18 06:16	09/17/18 15:15	
Aroclor 1232	ND		49	17	ug/Kg		09/14/18 06:16	09/17/18 15:15	
Aroclor 1242	ND		49	17	ug/Kg		09/14/18 06:16	09/17/18 15:15	
N===l== 4040	ND		49		ug/Kg		09/14/18 06:16	09/17/18 15:15	
Arocior 1248	IND		70						
Aroclor 1248 Aroclor 1254	ND		49		ug/Kg		09/14/18 06:16	09/17/18 15:15	

Analyzed

09/17/18 15:15

Prepared

09/14/18 06:16

Limits

45 - 120

%Recovery Qualifier

49

Dil Fac

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-5

Matrix: Solid

Client Sample ID: AOC4-SV14-15

Date Collected: 09/10/18 11:00 Date Received: 09/10/18 13:20

Method: 8260B - Volatile Organic Analyte	-	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Bromobenzene	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Bromochloromethane	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Bromodichloromethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	· · · · · · .
Bromoform	ND	*	3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
2-Butanone (MEK)	ND		7.3		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Carbon tetrachloride	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Chlorobenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Chloroethane	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Chloroform	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Chloromethane	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
2-Chlorotoluene	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
4-Chlorotoluene	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
cis-1,2-Dichloroethene	ND		1.5		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 13:16	
cis-1,3-Dichloropropene	ND		1.5		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 13:16	
Dibromochloromethane	ND						09/10/18 14:26	09/14/18 13:16	
	ND ND		1.5 3.7		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2-Dibromo-3-Chloropropane									
1,2-Dibromoethane (EDB)	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Dibromomethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2-Dichlorobenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,3-Dichlorobenzene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,4-Dichlorobenzene	ND		1.5				09/10/18 14:26	09/14/18 13:16	
Dichlorodifluoromethane	ND		3.7	1.5	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,1-Dichloroethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2-Dichloroethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,1-Dichloroethene	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2-Dichloropropane	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,3-Dichloropropane	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
2,2-Dichloropropane	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,1-Dichloropropene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Ethylbenzene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Hexachlorobutadiene	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
sopropylbenzene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Methylene Chloride	ND		15	3.7	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Methyl-t-Butyl Ether (MTBE)	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
m,p-Xylene	ND		2.9	1.5	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Naphthalene	ND		3.7	1.5	ug/Kg		09/10/18 14:26	09/14/18 13:16	
n-Butylbenzene	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
N-Propylbenzene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
p-Xylene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
o-Isopropyltoluene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
sec-Butylbenzene	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Styrene	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
ert-Butylbenzene	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,1,1,2-Tetrachloroethane	ND		3.7		ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,1,2,2-Tetrachloroethane	ND		1.5		ug/Kg		09/10/18 14:26	09/14/18 13:16	
Tetrachloroethene	ND		1.5		ug/Kg ug/Kg		09/10/18 14:26	09/14/18 13:16	
Toluene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	

TestAmerica Irvine

Client: Parsons Corporation

Date Collected: 09/10/18 11:00

Date Received: 09/10/18 13:20

Aroclor 1242

Aroclor 1248

Aroclor 1254

Aroclor 1260

Surrogate

DCB Decachlorobiphenyl (Surr)

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV14-15

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-5

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2,3-Trichlorobenzene	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	•
1,2,4-Trichlorobenzene	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	•
1,1,1-Trichloroethane	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	•
1,1,2-Trichloroethane	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	•
Trichloroethene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Trichlorofluoromethane	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2,3-Trichloropropane	ND		7.3	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,2,4-Trimethylbenzene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
1,3,5-Trimethylbenzene	ND		1.5	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	
Vinyl chloride	ND		3.7	0.73	ug/Kg		09/10/18 14:26	09/14/18 13:16	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		79 - 120				09/10/18 14:26	09/14/18 13:16	
Dibromofluoromethane (Surr)	115		60 - 120				09/10/18 14:26	09/14/18 13:16	
Toluene-d8 (Surr)	100		79 - 123				09/10/18 14:26	09/14/18 13:16	
Analyte GRO (C4-C12)	Result ND	Qualifier	RL 400		Unit ua/Ka	D	Prepared	Analyzed 09/14/18 17:47	Dil Fa
GRO (C4-C12)	ND		400	150	ug/Kg			09/14/18 17:47	
Surrogate	%Recovery		Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	60	X	65 - 140					09/14/18 17:47	
Method: 8015B - Diesel Range	Organics (DRO)	(GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND		4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 17:00	,
ORO (C23-C40)	4.3	JB	4.9	2.5	mg/Kg		09/14/18 06:01	09/14/18 17:00	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
n-Octacosane	47		40 - 140				09/14/18 06:01	09/14/18 17:00	
Method: 8082 - Polychlorinate			• •	-					
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		09/14/18 06:16	09/17/18 15:28	
Aroclor 1221	ND ND		50 50		ug/Kg		09/14/18 06:16	09/17/18 15:28	

50

50

50

50

Limits

45 - 120

17 ug/Kg

17 ug/Kg

17 ug/Kg

17 ug/Kg

09/14/18 06:16

09/14/18 06:16

09/14/18 06:16

09/14/18 06:16

Prepared

09/14/18 06:16

09/17/18 15:28

09/17/18 15:28

09/17/18 15:28

09/17/18 15:28

Analyzed

09/17/18 15:28

ND

ND

ND

ND

%Recovery Qualifier

51

Dil Fac

Client: Parsons Corporation

Client Sample ID: EB-1

n-Butylbenzene

o-Xylene

Styrene

Toluene

N-Propylbenzene

p-Isopropyltoluene

sec-Butylbenzene

tert-Butylbenzene

Tetrachloroethene

1,1,1,2-Tetrachloroethane

1,1,2,2-Tetrachloroethane

Date Collected: 09/10/18 10:30

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-6

as campio isi 440 zioreo e

Matrix: Water

Method: 8260B - Volatile Organi	ic Compounds (GC/MS)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND	0.50	0.25	ug/L			09/15/18 03:14	
Bromobenzene	ND	0.50	0.25	ug/L			09/15/18 03:14	
Bromochloromethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
Bromodichloromethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
Bromoform	ND	1.0	0.40	ug/L			09/15/18 03:14	
Bromomethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
2-Butanone (MEK)	ND	5.0	2.5	ug/L			09/15/18 03:14	
Carbon tetrachloride	ND	0.50	0.25	ug/L			09/15/18 03:14	
Chlorobenzene	ND	0.50	0.25	ug/L			09/15/18 03:14	
Chloroethane	ND	1.0	0.40	ug/L			09/15/18 03:14	
Chloroform	ND	0.50	0.25	ug/L			09/15/18 03:14	
Chloromethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
2-Chlorotoluene	ND	0.50	0.25	ug/L			09/15/18 03:14	
4-Chlorotoluene	ND	0.50	0.25	ug/L			09/15/18 03:14	
cis-1,2-Dichloroethene	ND	0.50	0.25	ug/L			09/15/18 03:14	
cis-1,3-Dichloropropene	ND	0.50	0.25	ug/L			09/15/18 03:14	
Dibromochloromethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
1,2-Dibromo-3-Chloropropane	ND	1.0	0.50	ug/L			09/15/18 03:14	
1,2-Dibromoethane (EDB)	ND	0.50	0.25	ug/L			09/15/18 03:14	
Dibromomethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L			09/15/18 03:14	
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L			09/15/18 03:14	
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L			09/15/18 03:14	
Dichlorodifluoromethane	ND	1.0	0.40	ug/L			09/15/18 03:14	
1,1-Dichloroethane	ND	0.50	0.25	ug/L			09/15/18 03:14	
1,2-Dichloroethane	ND	0.50		ug/L			09/15/18 03:14	
1,1-Dichloroethene	ND	0.50	0.25	ug/L			09/15/18 03:14	
1,2-Dichloropropane	ND	0.50		ug/L			09/15/18 03:14	
1,3-Dichloropropane	ND	0.50		ug/L			09/15/18 03:14	
2,2-Dichloropropane	ND	1.0		ug/L			09/15/18 03:14	
1,1-Dichloropropene	ND	0.50		ug/L			09/15/18 03:14	
Ethylbenzene	ND	0.50		ug/L			09/15/18 03:14	
- Hexachlorobutadiene	ND	0.50		ug/L			09/15/18 03:14	
Isopropylbenzene	ND	0.50		ug/L			09/15/18 03:14	
Methylene Chloride	ND	2.0		ug/L			09/15/18 03:14	
Methyl-t-Butyl Ether (MTBE)	ND	0.50		ug/L			09/15/18 03:14	
m,p-Xylene	ND	1.0		ug/L			09/15/18 03:14	
Naphthalene	ND	1.0		ug/L			09/15/18 03:14	
	2		0.10	- 9				

TestAmerica Irvine

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

09/15/18 03:14

1.0

0.50

0.50

0.50

0.50

0.50

0.50

0.50

0.50

0.50

0.50

0.40 ug/L

0.25 ug/L

ND

0.28 J

3

6

8

10

12

1 A

4 E

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: EB-1 Lab Sample ID: 440-219730-6 Date Collected: 09/10/18 10:30

Matrix: Water

Date Received: 09/10/18 13:20

DCB Decachlorobiphenyl (Surr)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			09/15/18 03:14	
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			09/15/18 03:14	
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			09/15/18 03:14	
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			09/15/18 03:14	
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			09/15/18 03:14	
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			09/15/18 03:14	
Trichloroethene	ND		0.50	0.25	ug/L			09/15/18 03:14	
Trichlorofluoromethane	ND		0.50	0.25	ug/L			09/15/18 03:14	
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			09/15/18 03:14	
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			09/15/18 03:14	
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			09/15/18 03:14	
Vinyl chloride	ND		0.50	0.25	ug/L			09/15/18 03:14	
Surrogate %Re	ecovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	113	-	80 - 120					09/15/18 03:14	
Dibromofluoromethane (Surr)	103		76 - 132					09/15/18 03:14	
Toluene-d8 (Surr)	105		80 - 128					09/15/18 03:14	
Method: 8015B - Gasoline Range Organi Analyte GRO (C4-C12)	•	Qualifier	RL	MDL 25	Unit ug/L	D	Prepared	Analyzed 09/16/18 10:41	Dil Fa
Surrogate %Re	ecovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	93		65 - 140					09/16/18 10:41	
Method: 8015B - Diesel Range Organics Analyte		(GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
DRO (C13-C22)	ND		0.51	0.26	mg/L		09/12/18 14:12	09/13/18 03:27	
ORO (C23-C40)	ND		0.51		mg/L		09/12/18 14:12	09/13/18 03:27	
Surrogate %Re	ecovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
n-Octacosane	77		45 - 120				09/12/18 14:12	09/13/18 03:27	
Method: 8082 - Polychlorinated Bipheny	s (PCI	Bs) by Gas	Chromatography	,					
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Aroclor 1016	ND	-	1.0	0.50	ug/L		09/12/18 05:48	09/13/18 21:04	
Aroclor 1221	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 21:04	
Aroclor 1232	ND		1.0		ug/L		09/12/18 05:48	09/13/18 21:04	
Aroclor 1242	ND		1.0	0.50	_		09/12/18 05:48	09/13/18 21:04	
Aroclor 1248	ND		1.0	0.50			09/12/18 05:48	09/13/18 21:04	
Aroclor 1254	ND		1.0	0.50	_		09/12/18 05:48	09/13/18 21:04	
Aroclor 1260	ND		1.0	0.50	. 		09/12/18 05:48	09/13/18 21:04	

26 - 115

Client: Parsons Corporation

TestAmerica Job ID: 440-219730-1 Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid Prep Type: Total/NA

				Percent Su
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(79-120)	(60-120)	(79-123)
440-219566-A-4 MS	Matrix Spike	92	111	100
440-219566-A-4 MSD	Matrix Spike Duplicate	93	111	102
440-219730-1	AOC4-SV15-5	93	115	103
440-219730-2	AOC4-SV15-15	94	113	102
440-219730-3	AOC4-SV15-15D	91	115	100
440-219730-4	AOC4-SV14-5	94	116	103
440-219730-5	AOC4-SV14-15	94	115	100
LCS 440-498992/5	Lab Control Sample	93	109	103
MB 440-498992/4	Method Blank	90	113	105

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

				Percent Sur	rogate Recovery (Acceptance Limits)
		BFB	DBFM	TOL	
Lab Sample ID	Client Sample ID	(80-120)	(76-132)	(80-128)	
440-219730-6	EB-1	113	103	105	
440-219838-A-1 MS	Matrix Spike	104	103	96	
440-219838-A-1 MSD	Matrix Spike Duplicate	98	99	100	
LCS 440-499147/5	Lab Control Sample	104	104	96	
MB 440-499147/4	Method Blank	107	109	104	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB1	
Lab Sample ID	Client Sample ID	(65-140)	
440-219730-1	AOC4-SV15-5	73	
440-219730-2	AOC4-SV15-15	77	
440-219730-3	AOC4-SV15-15D	67	
440-219730-4	AOC4-SV14-5	39 X	
440-219730-5	AOC4-SV14-15	60 X	
440-219975-E-9 MS	Matrix Spike	88	
440-219975-E-9 MSD	Matrix Spike Duplicate	97	
LCS 440-498996/3	Lab Control Sample	110	
LCSD 440-498996/4	Lab Control Sample Dup	106	
MB 440-498996/5	Method Blank	103	

Page 18 of 48

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

BFB = 4-Bromofluorobenzene (Surr)

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB1	
Lab Sample ID	Client Sample ID	(65-140)	
440-219730-6	EB-1	93	
440-220206-A-1 MS	Matrix Spike	110	
440-220206-A-1 MSD	Matrix Spike Duplicate	107	
LCS 440-499265/28	Lab Control Sample	106	
MB 440-499265/30	Method Blank	94	
Surrogate Legend			

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTCN1	
Lab Sample ID	Client Sample ID	(40-140)	
440-219730-1	AOC4-SV15-5	59	
440-219730-1 MS	AOC4-SV15-5	56	
440-219730-1 MSD	AOC4-SV15-5	50	
440-219730-2	AOC4-SV15-15	64	
440-219730-3	AOC4-SV15-15D	66	
440-219730-4	AOC4-SV14-5	71	
440-219730-5	AOC4-SV14-15	47	
LCS 440-498978/2-A	Lab Control Sample	80	
MB 440-498978/1-A	Method Blank	81	
Surrogate Legend			

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTCN1	
Lab Sample ID	Client Sample ID	(45-120)	
440-219730-6	EB-1	77	
LCS 440-498584/2-A	Lab Control Sample	76	
LCSD 440-498584/3-A	Lab Control Sample Dup	67	
MB 440-498584/1-A	Method Blank	62	
Surrogate Legend			
OTCN = n-Octacosane			

TestAmerica Irvine

2

4

6

9

4 4

12

Surrogate Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		DCB2	
Lab Sample ID	Client Sample ID	(45-120)	
440-219730-1	AOC4-SV15-5	56	
440-219730-2	AOC4-SV15-15	55	
440-219730-3	AOC4-SV15-15D	46	
440-219730-4	AOC4-SV14-5	49	
440-219730-5	AOC4-SV14-15	51	
440-219944-B-1-D MS	Matrix Spike	68	
440-219944-B-1-E MSD	Matrix Spike Duplicate	88	
LCS 440-498981/2-A	Lab Control Sample	95	
MB 440-498981/1-A	Method Blank	95	
Surrogate Legend			

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		DCB2	
Lab Sample ID	Client Sample ID	(26-115)	
440-219730-6	EB-1	82	
440-219741-K-10-B MSD	Matrix Spike Duplicate	76	
440-219741-L-10-A MS	Matrix Spike	75	
LCS 440-498472/5-A	Lab Control Sample	74	
MB 440-498472/1-A	Method Blank	74	
Surrogate Legend			

TestAmerica Irvine

2

5

7

9

11

14

14

Method Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Gasoline Range Organics - (GC)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL IRV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL IRV
3546	Microwave Extraction	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL IRV
5035	Closed System Purge and Trap	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

9

3

4

Q

10

11

14

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-219730-1

Matrix: Solid

Client Sample ID: AOC4-SV15-5

Date Collected: 09/10/18 08:10 Date Received: 09/10/18 13:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.87 g	10 mL	499060	09/10/18 14:26	HR	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	498992	09/14/18 11:39	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.01 g	10 mL	498996	09/14/18 14:55	YCL	TAL IRV
Total/NA	Prep	3546			15.27 g	1 mL	498978	09/14/18 06:01	L1A	TAL IRV
Total/NA	Analysis	8015B		1			499059	09/14/18 13:18	LMB	TAL IRV
Total/NA	Prep	3546			15.12 g	2 mL	498981	09/14/18 06:16	L1A	TAL IRV
Total/NA	Analysis	8082		1			499348	09/17/18 14:35	JM	TAL IRV

Client Sample ID: AOC4-SV15-15 Lab Sample ID: 440-219730-2

Date Collected: 09/10/18 09:15 Date Received: 09/10/18 13:20

Matrix: Solid

TAL IRV

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Туре Factor Analyst Lab Run Total/NA 5035 Prep 10 mL 499060 09/10/18 14:26 HR TAL IRV 6.64 g Total/NA 8260B Analysis 1 10 mL 10 mL 498992 09/14/18 12:03 AYL TAL IRV 8015B TAL IRV Total/NA Analysis 5.02 g 10 mL 498996 09/14/18 15:23 YCL Total/NA 3546 15.20 g 1 mL 498978 09/14/18 06:01 TAL IRV Prep I 1A Total/NA Analysis 8015B 499059 09/14/18 16:38 LMB TAL IRV 3546 498981 09/14/18 06:16 TAL IRV Total/NA Prep 15.37 g 2 mL L1A

Client Sample ID: AOC4-SV15-15D Lab Sample ID: 440-219730-3

499348

09/17/18 14:48

Date Collected: 09/10/18 09:15 Date Received: 09/10/18 13:20

Analysis

8082

Total/NA

Matrix: Solid

JM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.72 g	10 mL	499060	09/10/18 14:26	HR	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	498992	09/14/18 12:27	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.13 g	10 mL	498996	09/14/18 15:52	YCL	TAL IRV
Total/NA	Prep	3546			15.29 g	1 mL	498978	09/14/18 06:01	L1A	TAL IRV
Total/NA	Analysis	8015B		1			499059	09/14/18 16:16	LMB	TAL IRV
Total/NA	Prep	3546			15.29 g	2 mL	498981	09/14/18 06:16	L1A	TAL IRV
Total/NA	Analysis	8082		1			499348	09/17/18 15:02	JM	TAL IRV

Client Sample ID: AOC4-SV14-5 Lab Sample ID: 440-219730-4

Date Collected: 09/10/18 08:30 Date Received: 09/10/18 13:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.11 g	10 mL	499060	09/10/18 14:26	HR	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	498992	09/14/18 12:51	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.05 g	10 mL	498996	09/14/18 16:21	YCL	TAL IRV

TestAmerica Irvine

Matrix: Solid

Lab Chronicle

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV14-5

TestAmerica Job ID: 440-219730-1

Lab Sample ID: 440-219730-4

Matrix: Solid

Date Collected: 09/10/18 08:30 Date Received: 09/10/18 13:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.29 g	1 mL	498978	09/14/18 06:01	L1A	TAL IRV
Total/NA	Analysis	8015B		1			499059	09/14/18 17:22	LMB	TAL IRV
Total/NA	Prep	3546			15.42 g	2 mL	498981	09/14/18 06:16	L1A	TAL IRV
Total/NA	Analysis	8082		1			499348	09/17/18 15:15	JM	TAL IRV

Client Sample ID: AOC4-SV14-15 Lab Sample ID: 440-219730-5

Date Collected: 09/10/18 11:00 Matrix: Solid

Date Received: 09/10/18 13:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.83 g	10 mL	499060	09/10/18 14:26	HR	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	498992	09/14/18 13:16	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.06 g	10 mL	498996	09/14/18 17:47	YCL	TAL IRV
Total/NA	Prep	3546			15.21 g	1 mL	498978	09/14/18 06:01	L1A	TAL IRV
Total/NA	Analysis	8015B		1			499059	09/14/18 17:00	LMB	TAL IRV
Total/NA	Prep	3546			15.05 g	2 mL	498981	09/14/18 06:16	L1A	TAL IRV
Total/NA	Analysis	8082		1			499348	09/17/18 15:28	JM	TAL IRV

Client Sample ID: EB-1 Lab Sample ID: 440-219730-6

Date Collected: 09/10/18 10:30 Matrix: Water Date Received: 09/10/18 13:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	499147	09/15/18 03:14	WC	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	499265	09/16/18 10:41	YCL	TAL IRV
Total/NA	Prep	3510C			245 mL	1 mL	498584	09/12/18 14:12	AJP	TAL IRV
Total/NA	Analysis	8015B		1			498686	09/13/18 03:27	LMB	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	498472	09/12/18 05:48	L1H	TAL IRV
Total/NA	Analysis	8082		1			498839	09/13/18 21:04	JM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-498992/4

Matrix: Solid

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prepared	Analyzed	Dil Fac
	09/14/18 08:13	1
	09/14/18 08:13	1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
Bromobenzene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
Bromochloromethane	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
Bromodichloromethane	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
Bromoform	ND		5.0	2.0	ug/Kg			09/14/18 08:13	
2-Butanone (MEK)	ND		10	5.0	ug/Kg			09/14/18 08:13	
Carbon tetrachloride	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
Chlorobenzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
Chloroethane	ND		5.0	2.0	ug/Kg			09/14/18 08:13	
Chloroform	ND		2.0		ug/Kg			09/14/18 08:13	
Chloromethane	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
2-Chlorotoluene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
4-Chlorotoluene	ND		5.0					09/14/18 08:13	
cis-1,2-Dichloroethene	ND		2.0		ug/Kg			09/14/18 08:13	
cis-1,3-Dichloropropene	ND		2.0		ug/Kg			09/14/18 08:13	
Dibromochloromethane	ND		2.0		ug/Kg			09/14/18 08:13	
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg ug/Kg			09/14/18 08:13	
1,2-Dibromoethane (EDB)	ND		2.0		ug/Kg ug/Kg			09/14/18 08:13	
Dibromomethane	ND		2.0		ug/Kg ug/Kg			09/14/18 08:13	
1,2-Dichlorobenzene	ND		2.0		ug/Kg			09/14/18 08:13	
1,3-Dichlorobenzene	ND		2.0		ug/Kg			09/14/18 08:13	
1,4-Dichlorobenzene	ND		2.0		ug/Kg			09/14/18 08:13	
Dichlorodifluoromethane	ND		5.0		ug/Kg			09/14/18 08:13	
1,1-Dichloroethane	ND		2.0		ug/Kg			09/14/18 08:13	
1,2-Dichloroethane	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
1,1-Dichloroethene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
1,2-Dichloropropane	ND		2.0		ug/Kg			09/14/18 08:13	
1,3-Dichloropropane	ND		2.0		ug/Kg			09/14/18 08:13	
2,2-Dichloropropane	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
1,1-Dichloropropene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
Ethylbenzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
Hexachlorobutadiene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
Isopropylbenzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
Methylene Chloride	ND		20	5.0	ug/Kg			09/14/18 08:13	
Methyl-t-Butyl Ether (MTBE)	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
m,p-Xylene	ND		4.0	2.0	ug/Kg			09/14/18 08:13	
Naphthalene	ND		5.0	2.0	ug/Kg			09/14/18 08:13	
n-Butylbenzene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	
N-Propylbenzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
o-Xylene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	
p-Isopropyltoluene	ND		2.0		ug/Kg			09/14/18 08:13	
sec-Butylbenzene	ND		5.0		ug/Kg			09/14/18 08:13	
Styrene	ND		2.0		ug/Kg			09/14/18 08:13	
tert-Butylbenzene	ND		5.0		ug/Kg			09/14/18 08:13	
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			09/14/18 08:13	
1,1,2,2-Tetrachloroethane	ND		2.0		ug/Kg			09/14/18 08:13	
Tetrachloroethene	ND		2.0		ug/Kg ug/Kg			09/14/18 08:13	
Toluene	ND		2.0		ug/Kg ug/Kg			09/14/18 08:13	

TestAmerica Irvine

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: MB 440-498992/4

Tojourolle. Ertoob resedu H.o., ort

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Analysis Batch: 498992

Client Sample ID: Method Blank Prep Type: Total/NA

7									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
trans-1,3-Dichloropropene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
1,2,3-Trichlorobenzene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	1
1,2,4-Trichlorobenzene	ND		5.0	1.0	ug/Kg			09/14/18 08:13	1
1,1,1-Trichloroethane	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
1,1,2-Trichloroethane	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
Trichloroethene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
Trichlorofluoromethane	ND		5.0	1.0	ug/Kg			09/14/18 08:13	1
1,2,3-Trichloropropane	ND		10	1.0	ug/Kg			09/14/18 08:13	1
1,2,4-Trimethylbenzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
1,3,5-Trimethylbenzene	ND		2.0	1.0	ug/Kg			09/14/18 08:13	1
Vinyl chloride	ND		5.0	1.0	ug/Kg			09/14/18 08:13	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		79 - 120	_		09/14/18 08:13	1
Dibromofluoromethane (Surr)	113		60 - 120			09/14/18 08:13	1
Toluene-d8 (Surr)	105		79 - 123			09/14/18 08:13	1

Lab Sample ID: LCS 440-498992/5

Matrix: Solid

Analysis Batch: 498992

Client Sample ID:	Lab	Co	ntro	I Sar	nple
	Prep	Ty	/pe:	Tota	I/NA

•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	45.4		ug/Kg		91	65 _ 120
Bromobenzene	50.0	51.9		ug/Kg		104	75 - 120
Bromochloromethane	50.0	59.1		ug/Kg		118	70 - 135
Bromodichloromethane	50.0	57.4		ug/Kg		115	70 - 135
Bromoform	50.0	73.2	*	ug/Kg		146	55 - 135
Bromomethane	50.0	45.8		ug/Kg		92	60 - 145
2-Butanone (MEK)	50.0	53.4		ug/Kg		107	40 - 145
Carbon tetrachloride	50.0	55.6		ug/Kg		111	65 - 140
Chlorobenzene	50.0	48.8		ug/Kg		98	75 - 120
Chloroethane	50.0	44.7		ug/Kg		89	60 - 140
Chloroform	50.0	53.0		ug/Kg		106	70 - 130
Chloromethane	50.0	36.3		ug/Kg		73	45 ₋ 145
2-Chlorotoluene	50.0	43.8		ug/Kg		88	70 - 125
4-Chlorotoluene	50.0	42.6		ug/Kg		85	75 ₋ 125
cis-1,2-Dichloroethene	50.0	51.1		ug/Kg		102	70 - 125
cis-1,3-Dichloropropene	50.0	54.6		ug/Kg		109	75 - 125
Dibromochloromethane	50.0	60.7		ug/Kg		121	65 - 140
1,2-Dibromo-3-Chloropropane	50.0	47.0		ug/Kg		94	50 - 135
1,2-Dibromoethane (EDB)	50.0	55.5		ug/Kg		111	70 - 130
Dibromomethane	50.0	59.3		ug/Kg		119	70 - 130
1,2-Dichlorobenzene	50.0	45.6		ug/Kg		91	75 ₋ 120
1,3-Dichlorobenzene	50.0	43.4		ug/Kg		87	75 - 125
1,4-Dichlorobenzene	50.0	44.0		ug/Kg		88	75 - 120
Dichlorodifluoromethane	50.0	42.4		ug/Kg		85	35 - 160
1,1-Dichloroethane	50.0	50.3		ug/Kg		101	70 - 130

TestAmerica Irvine

Page 25 of 48

3

5

1

9

11

12

1 A

14

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-498992/5

Matrix: Solid

Analysis Batch: 498992

Client Sample ID: Lab Control Sample Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2-Dichloroethane	50.0	56.7		ug/Kg		113	60 - 140	
1,1-Dichloroethene	50.0	49.3		ug/Kg		99	70 - 125	
1,2-Dichloropropane	50.0	53.8		ug/Kg		108	70 - 130	
1,3-Dichloropropane	50.0	52.1		ug/Kg		104	70 - 125	
2,2-Dichloropropane	50.0	52.3		ug/Kg		105	60 - 145	
1,1-Dichloropropene	50.0	49.5		ug/Kg		99	70 - 130	
Ethylbenzene	50.0	44.6		ug/Kg		89	70 _ 125	
Hexachlorobutadiene	50.0	64.9		ug/Kg		130	60 - 135	
Isopropylbenzene	50.0	46.0		ug/Kg		92	75 - 130	
Methylene Chloride	50.0	52.1		ug/Kg		104	55 ₋ 135	
Methyl-t-Butyl Ether (MTBE)	50.0	54.5		ug/Kg		109	60 - 140	
m,p-Xylene	50.0	50.1		ug/Kg		100	70 _ 125	
Naphthalene	50.0	45.5		ug/Kg		91	55 ₋ 135	
n-Butylbenzene	50.0	40.7		ug/Kg		81	70 - 130	
N-Propylbenzene	50.0	41.2		ug/Kg		82	70 - 130	
o-Xylene	50.0	50.4		ug/Kg		101	70 - 125	
p-Isopropyltoluene	50.0	41.7		ug/Kg		83	75 - 125	
sec-Butylbenzene	50.0	41.1		ug/Kg		82	70 _ 125	
Styrene	50.0	47.2		ug/Kg		94	75 - 130	
tert-Butylbenzene	50.0	42.8		ug/Kg		86	70 - 125	
1,1,1,2-Tetrachloroethane	50.0	57.3		ug/Kg		115	70 - 130	
1,1,2,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	55 ₋ 140	
Tetrachloroethene	50.0	53.3		ug/Kg		107	70 - 125	
Toluene	50.0	44.5		ug/Kg		89	70 _ 125	
trans-1,2-Dichloroethene	50.0	50.7		ug/Kg		101	70 _ 125	
trans-1,3-Dichloropropene	50.0	55.4		ug/Kg		111	70 - 135	
1,2,3-Trichlorobenzene	50.0	56.6		ug/Kg		113	60 - 130	
1,2,4-Trichlorobenzene	50.0	52.1		ug/Kg		104	70 _ 135	
1,1,1-Trichloroethane	50.0	53.1		ug/Kg		106	65 - 135	
1,1,2-Trichloroethane	50.0	53.8		ug/Kg		108	65 - 135	
Trichloroethene	50.0	51.9		ug/Kg		104	70 - 125	
Trichlorofluoromethane	50.0	50.3		ug/Kg		101	60 - 145	
1,2,3-Trichloropropane	50.0	49.9		ug/Kg		100	60 - 135	
1,2,4-Trimethylbenzene	50.0	42.7		ug/Kg		85	70 - 125	
1,3,5-Trimethylbenzene	50.0	42.6		ug/Kg		85	70 - 125	
Vinyl chloride	50.0	46.7		ug/Kg		93	55 - 135	

LCS LCS

Surrogate	%Recovery C	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		79 - 120
Dibromofluoromethane (Surr)	109		60 - 120
Toluene-d8 (Surr)	103		79 - 123

Lab Sample ID: 440-219566-A-4 MS

Matrix: Solid

Analysis Batch: 498992

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		49.7	46.2		ug/Kg		93	65 - 130	

TestAmerica Irvine

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Page 26 of 48

9/18/2018

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-219566-A-4 MS

Matrix: Solid

Client Sample ID: Matrix Spike Prep Type: Total/NA

	Sample 3	Sample S _l	oike I	MS MS				%Rec.
Analyte	Result (Qualifier Ad	ded Res	ult Qualifier	Unit	D	%Rec	Limits
Bromobenzene	ND		19.7 52	2.2	ug/Kg		105	65 - 140
Bromochloromethane	ND	4	19.7 59	9.5	ug/Kg		120	65 - 145
Bromodichloromethane	ND		19.7 56	3.8	ug/Kg		114	65 - 145
Bromoform	ND '	*	19.7 69	9.9	ug/Kg		141	50 - 145
Bromomethane	ND	4	19.7 47	7.2	ug/Kg		95	60 ₋ 155
2-Butanone (MEK)	ND		19.7 54	I.5	ug/Kg		110	25 - 170
Carbon tetrachloride	ND			5.9	ug/Kg		112	60 - 145
Chlorobenzene	ND			7.5	ug/Kg		95	70 - 130
Chloroethane	ND		19.7 45	5.5	ug/Kg		92	60 - 150
Chloroform	ND			3.9	ug/Kg		108	65 _ 135
Chloromethane	ND			3.3	ug/Kg		77	40 - 145
2-Chlorotoluene	ND			3.9	ug/Kg		88	60 - 135
4-Chlorotoluene	ND			1.5	ug/Kg		84	65 - 135
cis-1,2-Dichloroethene	ND			1.9	ug/Kg		104	65 - 135
cis-1,3-Dichloropropene	ND			3.2	ug/Kg		107	70 - 135
Dibromochloromethane	ND			3.2	ug/Kg		117	60 - 145
1,2-Dibromo-3-Chloropropane	ND			3.0	ug/Kg ug/Kg		97	40 - 150
1,2-Dibromoethane (EDB)	ND			3.9	ug/Kg		108	65 - 140
Dibromomethane	ND			7.2	ug/Kg ug/Kg		115	65 - 140
1,2-Dichlorobenzene	ND			. <u>.</u> 3.7	ug/Kg ug/Kg		94	70 ₋ 130
1,3-Dichlorobenzene	ND			3.2	ug/Kg		87	70 - 130
1,4-Dichlorobenzene	ND ND			3.9	ug/Kg ug/Kg		88	70 - 130 70 - 130
Dichlorodifluoromethane	ND ND			2.9	ug/Kg ug/Kg		86	30 ₋ 160
1,1-Dichloroethane).7			102	65 - 135
1,2-Dichloroethane	ND ND			5.5	ug/Kg		112	60 - 150
					ug/Kg			
1,1-Dichloroethene	ND).6	ug/Kg		102	65 - 135
1,2-Dichloropropane	ND ND			3.2	ug/Kg		107	65 ₋ 130 65 ₋ 140
1,3-Dichloropropane).3	ug/Kg		101	
2,2-Dichloropropane	ND			9.7	ug/Kg		100	65 - 150
1,1-Dichloropropene	ND			9.9	ug/Kg		100	65 - 135
Ethylbenzene	ND			3.0	ug/Kg		87	70 - 135
Hexachlorobutadiene	ND			3.5	ug/Kg		128	50 - 145
Isopropylbenzene	ND			1.8	ug/Kg		90	70 - 145
Methylene Chloride	ND			2.1	ug/Kg		105	55 - 145
Methyl-t-Butyl Ether (MTBE)	ND			3.4	ug/Kg		107	55 - 155
m,p-Xylene	ND			3.3	ug/Kg		97	70 - 130
Naphthalene	ND			1.4	ug/Kg		89	40 - 150
n-Butylbenzene	ND).9	ug/Kg		82	55 - 145
N-Propylbenzene	ND			1.4	ug/Kg		83	65 - 140
o-Xylene	ND			7.5	ug/Kg		96	65 - 130
p-Isopropyltoluene	ND).9	ug/Kg		82	60 - 140
sec-Butylbenzene	ND			9.9	ug/Kg		80	60 - 135
Styrene	ND			5.0	ug/Kg		91	70 - 140
tert-Butylbenzene	ND			3.0	ug/Kg		87	60 - 140
1,1,1,2-Tetrachloroethane	ND			5.1	ug/Kg		111	65 _ 145
1,1,2,2-Tetrachloroethane	ND			3.3	ug/Kg		97	40 - 160
Tetrachloroethene	ND	4	19.7 50	0.0	ug/Kg		101	65 ₋ 135
Toluene	ND	4	19.7 42	2.8	ug/Kg		86	70 - 130

TestAmerica Irvine

4

6

8

10

12

13

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-219566-A-4 MS

Matrix: Solid

Analysis Batch: 498992

Client Sample ID: Matrix Spike
Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,2-Dichloroethene	ND		49.7	52.0		ug/Kg		105	70 _ 135	
trans-1,3-Dichloropropene	ND		49.7	52.4		ug/Kg		105	60 _ 145	
1,2,3-Trichlorobenzene	1.8	J	49.7	55.4		ug/Kg		108	45 _ 145	
1,2,4-Trichlorobenzene	ND		49.7	52.7		ug/Kg		106	50 - 140	
1,1,1-Trichloroethane	ND		49.7	53.6		ug/Kg		108	65 _ 145	
1,1,2-Trichloroethane	ND		49.7	52.8		ug/Kg		106	65 - 140	
Trichloroethene	ND		49.7	52.4		ug/Kg		105	65 _ 140	
Trichlorofluoromethane	ND		49.7	50.3		ug/Kg		101	55 _ 155	
1,2,3-Trichloropropane	ND		49.7	51.2		ug/Kg		103	50 - 150	
1,2,4-Trimethylbenzene	ND		49.7	41.8		ug/Kg		84	65 _ 140	
1,3,5-Trimethylbenzene	ND		49.7	42.8		ug/Kg		86	65 _ 135	
Vinyl chloride	ND		49.7	45.9		ug/Kg		92	55 _ 140	

MS MS

ND

ND

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		79 - 120
Dibromofluoromethane (Surr)	111		60 - 120
Toluene-d8 (Surr)	100		79 - 123

Lab Sample ID: 440-219566-A-4 MSD

Matrix: Solid

Analysis Batch: 498992

Dichlorodifluoromethane

1,1-Dichloroethane

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

RPD MSD MSD %Rec. Sample Sample Spike Analyte Result Qualifier Added Qualifier %Rec Limits RPD Limit Result Unit Benzene ND 49.7 44.6 90 20 65 _ 130 ug/Kg Bromobenzene ND 49.7 51.1 ug/Kg 103 65 - 1402 25 Bromochloromethane ND 49.7 60.8 ug/Kg 122 65 - 145 25 Bromodichloromethane ND 49.7 57.3 ug/Kg 115 65 - 145 20 Bromoform ND 49.7 71.0 143 50 - 145 30 ug/Kg 92 Bromomethane ND 49.7 45.7 ug/Kg 60 - 155 25 ND 2-Butanone (MEK) 49.7 55.8 ug/Kg 112 25 - 170 40 Carbon tetrachloride ND 25 49.7 55.5 ug/Kg 112 60 - 145 Chlorobenzene ND 49.7 47.1 95 70 - 130 25 ug/Kg Chloroethane ND 49.7 43.6 ug/Kg 88 60 - 150 25 Chloroform ND 49.7 53.5 ug/Kg 108 65 - 135 20 Chloromethane NΠ 497 35.7 72 40 - 145 25 ug/Kg 2-Chlorotoluene ND 49.7 42.9 86 60 - 135 25 ug/Kg 4-Chlorotoluene ND 49.7 41.5 83 25 65 - 135 0 ug/Kg cis-1,2-Dichloroethene ND 49.7 50.7 ug/Kg 102 65 - 135 25 cis-1,3-Dichloropropene ND 49.7 52.8 106 70 - 135 25 ug/Kg Dibromochloromethane ND 49.7 58.7 ug/Kg 118 60 - 145 25 1,2-Dibromo-3-Chloropropane ND 49.7 46.5 ug/Kg 93 40 - 150 3 30 ND 49.7 54.0 109 65 - 140 25 1,2-Dibromoethane (EDB) ug/Kg Dibromomethane ND 49.7 57.0 115 65 - 140 25 ug/Kg 46.2 25 1,2-Dichlorobenzene ND 49.7 ug/Kg 93 70 - 1301,3-Dichlorobenzene ND 49.7 42.5 85 70 - 130 25 ug/Kg ND 41.9 84 25 1.4-Dichlorobenzene 49.7 ug/Kg 70 - 130 5

TestAmerica Irvine

Page 28 of 48

41.2

49.7

ug/Kg

ug/Kg

83

100

30 - 160

65 - 135

49.7

49.7

G

3

5

7

a

11

4.0

. .

15

9/18/2018

35

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-219566-A-4 MSD

Matrix: Solid

Analysis Batch: 498992

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dichloroethane	ND		49.7	55.3	-	ug/Kg		111	60 - 150	0	25
1,1-Dichloroethene	ND		49.7	47.3		ug/Kg		95	65 - 135	7	25
1,2-Dichloropropane	ND		49.7	53.0		ug/Kg		107	65 - 130	0	20
1,3-Dichloropropane	ND		49.7	51.1		ug/Kg		103	65 - 140	2	25
2,2-Dichloropropane	ND		49.7	54.2		ug/Kg		109	65 - 150	9	25
1,1-Dichloropropene	ND		49.7	48.9		ug/Kg		98	65 - 135	2	20
Ethylbenzene	ND		49.7	43.3		ug/Kg		87	70 - 135	1	25
Hexachlorobutadiene	ND		49.7	65.6		ug/Kg		132	50 - 145	3	35
Isopropylbenzene	ND		49.7	44.5		ug/Kg		90	70 - 145	1	25
Methylene Chloride	ND		49.7	52.6		ug/Kg		106	55 - 145	1	25
Methyl-t-Butyl Ether (MTBE)	ND		49.7	53.9		ug/Kg		108	55 - 155	1	35
m,p-Xylene	ND		49.7	48.0		ug/Kg		97	70 - 130	0	25
Naphthalene	ND		49.7	44.9		ug/Kg		90	40 - 150	1	40
n-Butylbenzene	ND		49.7	40.1		ug/Kg		81	55 - 145	2	30
N-Propylbenzene	ND		49.7	40.3		ug/Kg		81	65 - 140	3	25
o-Xylene	ND		49.7	47.4		ug/Kg		95	65 - 130	0	25
p-Isopropyltoluene	ND		49.7	41.0		ug/Kg		82	60 - 140	0	25
sec-Butylbenzene	ND		49.7	40.1		ug/Kg		81	60 - 135	0	25
Styrene	ND		49.7	46.2		ug/Kg		93	70 - 140	3	25
tert-Butylbenzene	ND		49.7	42.1		ug/Kg		85	60 - 140	2	25
1,1,1,2-Tetrachloroethane	ND		49.7	55.1		ug/Kg		111	65 - 145	0	20
1,1,2,2-Tetrachloroethane	ND		49.7	46.5		ug/Kg		94	40 - 160	4	30
Tetrachloroethene	ND		49.7	50.7		ug/Kg		102	65 - 135	1	25
Toluene	ND		49.7	42.8		ug/Kg		86	70 - 130	0	20
trans-1,2-Dichloroethene	ND		49.7	50.1		ug/Kg		101	70 - 135	4	25
trans-1,3-Dichloropropene	ND		49.7	54.4		ug/Kg		109	60 - 145	4	25
1,2,3-Trichlorobenzene	1.8	J	49.7	56.4		ug/Kg		110	45 - 145	2	30
1,2,4-Trichlorobenzene	ND		49.7	52.4		ug/Kg		106	50 - 140	1	30
1,1,1-Trichloroethane	ND		49.7	51.5		ug/Kg		104	65 - 145	4	20
1,1,2-Trichloroethane	ND		49.7	52.1		ug/Kg		105	65 - 140	1	30
Trichloroethene	ND		49.7	49.9		ug/Kg		100	65 - 140	5	25
Trichlorofluoromethane	ND		49.7	48.6		ug/Kg		98	55 - 155	3	25
1,2,3-Trichloropropane	ND		49.7	46.9		ug/Kg		94	50 - 150	9	30
1,2,4-Trimethylbenzene	ND		49.7	41.0		ug/Kg		82	65 - 140	2	25
1,3,5-Trimethylbenzene	ND		49.7	41.2		ug/Kg		83	65 - 135	4	25
Vinyl chloride	ND		49.7	44.6		ug/Kg		90	55 - 140	3	30

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	93	79 - 120
Dibromofluoromethane (Surr)	111	60 - 120
Toluene-d8 (Surr)	102	79 - 123

Lab Sample ID: MB 440-499147/4

Matrix: Water

Analysis Batch: 499147

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			09/14/18 19:13	1

TestAmerica Irvine

Page 29 of 48

9/18/2018

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

TestAmerica Job ID: 440-219730-1

Lab Sample ID: MB 440-499147/4

Matrix: Water

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Bromobenzene	ND		0.50	0.25	ug/L			09/14/18 19:13	
Bromochloromethane	ND		0.50	0.25	ug/L			09/14/18 19:13	
Bromodichloromethane	ND		0.50	0.25	ug/L			09/14/18 19:13	
Bromoform	ND		1.0	0.40	ug/L			09/14/18 19:13	
Bromomethane	ND		0.50	0.25	ug/L			09/14/18 19:13	
2-Butanone (MEK)	ND		5.0	2.5	ug/L			09/14/18 19:13	
Carbon tetrachloride	ND		0.50	0.25	ug/L			09/14/18 19:13	
Chlorobenzene	ND		0.50	0.25	ug/L			09/14/18 19:13	
Chloroethane	ND		1.0	0.40	ug/L			09/14/18 19:13	
Chloroform	ND		0.50	0.25	ug/L			09/14/18 19:13	
Chloromethane	ND		0.50	0.25	ug/L			09/14/18 19:13	
2-Chlorotoluene	ND		0.50	0.25	ug/L			09/14/18 19:13	
4-Chlorotoluene	ND		0.50	0.25	ug/L			09/14/18 19:13	
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			09/14/18 19:13	
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/14/18 19:13	
Dibromochloromethane	ND		0.50		ug/L			09/14/18 19:13	
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			09/14/18 19:13	
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			09/14/18 19:13	
Dibromomethane	ND		0.50		ug/L			09/14/18 19:13	
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			09/14/18 19:13	
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			09/14/18 19:13	
1,4-Dichlorobenzene	ND		0.50		ug/L			09/14/18 19:13	
Dichlorodifluoromethane	ND		1.0		ug/L			09/14/18 19:13	
1,1-Dichloroethane	ND		0.50		ug/L			09/14/18 19:13	
1,2-Dichloroethane	ND		0.50		ug/L			09/14/18 19:13	
1,1-Dichloroethene	ND		0.50		ug/L			09/14/18 19:13	
1,2-Dichloropropane	ND		0.50		ug/L			09/14/18 19:13	
1,3-Dichloropropane	ND		0.50		ug/L			09/14/18 19:13	
2,2-Dichloropropane	ND		1.0		ug/L			09/14/18 19:13	
1,1-Dichloropropene	ND		0.50		ug/L			09/14/18 19:13	
Ethylbenzene	ND		0.50		ug/L			09/14/18 19:13	
Hexachlorobutadiene	ND		0.50		ug/L			09/14/18 19:13	
Isopropylbenzene	ND		0.50		ug/L			09/14/18 19:13	
Methylene Chloride	ND		2.0		ug/L			09/14/18 19:13	
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			09/14/18 19:13	
m,p-Xylene	ND		1.0		ug/L			09/14/18 19:13	
Naphthalene	ND		1.0		ug/L			09/14/18 19:13	
n-Butylbenzene	ND		1.0		ug/L			09/14/18 19:13	
N-Propylbenzene	ND		0.50		ug/L			09/14/18 19:13	
o-Xylene	ND		0.50		ug/L			09/14/18 19:13	
p-Isopropyltoluene	ND		0.50		ug/L			09/14/18 19:13	
sec-Butylbenzene	ND		0.50		ug/L			09/14/18 19:13	
Styrene	ND		0.50		ug/L			09/14/18 19:13	
•	ND ND		0.50		ug/L ug/L			09/14/18 19:13	
tert-Butylbenzene									
1,1,1,2-Tetrachloroethane	ND ND		0.50		ug/L			09/14/18 19:13	
1,1,2,2-Tetrachloroethane	ND ND		0.50		ug/L			09/14/18 19:13	
Tetrachloroethene Toluene	ND ND		0.50		ug/L ug/L			09/14/18 19:13 09/14/18 19:13	

TestAmerica Irvine

3

Ē

6

8

10

12

1 /

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

•

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-499147/4

Matrix: Water

Analysis Batch: 499147

Client Sample ID: Method Blank Prep Type: Total/NA

-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			09/14/18 19:13	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			09/14/18 19:13	•
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			09/14/18 19:13	
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			09/14/18 19:13	
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			09/14/18 19:13	
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			09/14/18 19:13	
Trichloroethene	ND		0.50	0.25	ug/L			09/14/18 19:13	
Trichlorofluoromethane	ND		0.50	0.25	ug/L			09/14/18 19:13	•
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			09/14/18 19:13	
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			09/14/18 19:13	
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			09/14/18 19:13	
Vinyl chloride	ND		0.50	0.25	ug/L			09/14/18 19:13	

MB MB

Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107	80 - 120	_		09/14/18 19:13	1
Dibromofluoromethane (Surr)	109	76 - 132			09/14/18 19:13	1
Toluene-d8 (Surr)	104	80 - 128			09/14/18 19:13	1

Lab Sample ID: LCS 440-499147/5

Matrix: Water

Analysis Batch: 499147

Client Sample ID: Lab Control Sample Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	25.0	26.0		ug/L		104	68 - 130
Bromobenzene	25.0	28.3		ug/L		113	70 - 130
Bromochloromethane	25.0	27.1		ug/L		108	70 - 130
Bromodichloromethane	25.0	30.6		ug/L		122	70 - 132
Bromoform	25.0	26.2		ug/L		105	60 - 148
Bromomethane	25.0	26.8		ug/L		107	64 - 139
2-Butanone (MEK)	25.0	26.6		ug/L		106	44 - 150
Carbon tetrachloride	25.0	27.9		ug/L		111	60 - 150
Chlorobenzene	25.0	24.5		ug/L		98	70 - 130
Chloroethane	25.0	26.0		ug/L		104	64 - 135
Chloroform	25.0	27.9		ug/L		111	70 - 130
Chloromethane	25.0	28.0		ug/L		112	47 - 140
2-Chlorotoluene	25.0	25.9		ug/L		104	70 - 130
4-Chlorotoluene	25.0	27.8		ug/L		111	70 - 130
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	70 - 133
cis-1,3-Dichloropropene	25.0	26.8		ug/L		107	70 - 133
Dibromochloromethane	25.0	28.3		ug/L		113	69 ₋ 145
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	52 ₋ 140
1,2-Dibromoethane (EDB)	25.0	27.3		ug/L		109	70 - 130
Dibromomethane	25.0	26.9		ug/L		108	70 - 130
1,2-Dichlorobenzene	25.0	28.6		ug/L		114	70 - 130
1,3-Dichlorobenzene	25.0	26.0		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
Dichlorodifluoromethane	25.0	28.3		ug/L		113	29 - 150
1,1-Dichloroethane	25.0	27.1		ug/L		108	64 - 130

TestAmerica Irvine

3

E

6

8

10

12

13

14

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-499147/5

Matrix: Water

Analysis Batch: 499147

Client Sample ID: Lab Control Sample Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2-Dichloroethane	25.0	30.7		ug/L		123	57 - 138	
1,1-Dichloroethene	25.0	27.7		ug/L		111	70 - 130	
1,2-Dichloropropane	25.0	27.1		ug/L		108	67 _ 130	
1,3-Dichloropropane	25.0	25.9		ug/L		104	70 - 130	
2,2-Dichloropropane	25.0	27.8		ug/L		111	68 _ 141	
1,1-Dichloropropene	25.0	27.5		ug/L		110	70 - 130	
Ethylbenzene	25.0	25.2		ug/L		101	70 _ 130	
Hexachlorobutadiene	25.0	26.3		ug/L		105	10 _ 150	
Isopropylbenzene	25.0	25.8		ug/L		103	70 - 136	
Methylene Chloride	25.0	25.3		ug/L		101	52 _ 130	
Methyl-t-Butyl Ether (MTBE)	25.0	28.0		ug/L		112	63 _ 131	
m,p-Xylene	25.0	25.6		ug/L		102	70 _ 130	
Naphthalene	25.0	22.5		ug/L		90	60 _ 140	
n-Butylbenzene	25.0	24.7		ug/L		99	65 - 150	
N-Propylbenzene	25.0	26.3		ug/L		105	67 _ 139	
o-Xylene	25.0	26.2		ug/L		105	70 - 130	
p-Isopropyltoluene	25.0	26.2		ug/L		105	70 - 132	
sec-Butylbenzene	25.0	25.1		ug/L		101	70 _ 138	
Styrene	25.0	25.4		ug/L		102	70 - 134	
tert-Butylbenzene	25.0	26.0		ug/L		104	70 _ 130	
1,1,1,2-Tetrachloroethane	25.0	27.3		ug/L		109	60 - 141	
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	63 _ 130	
Tetrachloroethene	25.0	24.0		ug/L		96	70 - 130	
Toluene	25.0	25.2		ug/L		101	70 - 130	
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	70 - 130	
trans-1,3-Dichloropropene	25.0	27.3		ug/L		109	70 - 132	
1,2,3-Trichlorobenzene	25.0	25.2		ug/L		101	60 _ 140	
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	60 _ 140	
1,1,1-Trichloroethane	25.0	28.3		ug/L		113	70 - 130	
1,1,2-Trichloroethane	25.0	28.0		ug/L		112	70 - 130	
Trichloroethene	25.0	27.6		ug/L		110	70 - 130	
Trichlorofluoromethane	25.0	27.5		ug/L		110	60 _ 150	
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	63 _ 130	
1,2,4-Trimethylbenzene	25.0	25.6		ug/L		103	70 _ 135	
1,3,5-Trimethylbenzene	25.0	26.1		ug/L		104	70 - 136	
Vinyl chloride	25.0	27.0		ug/L		108	59 - 133	
VIII TI CIII CIII CIII CIII CIII CIII CI	20.0	27.0		ug/L		100	00 - 100	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	104		76 - 132
Toluene-d8 (Surr)	96		80 - 128

Lab Sample ID: 440-219838-A-1 MS

Matrix: Water

Analysis Batch: 499147

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		25.0	26.2		ug/L	_	105	66 - 130	

TestAmerica Irvine

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Page 32 of 48

9/18/2018

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-219838-A-1 MS

Matrix: Water

Client Sa	mple ID:	Matrix	Spike
	Prep Ty	/pe: To	tal/NA

Analysis Batch: 499147	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Bromobenzene	ND		25.0	28.6		ug/L		114	70 - 130	
Bromochloromethane	ND		25.0	28.4		ug/L		113	70 - 130	
Bromodichloromethane	ND		25.0	30.1		ug/L		121	70 - 138	
Bromoform	ND		25.0	26.2		ug/L		105	59 - 150	
Bromomethane	ND		25.0	28.6		ug/L		114	62 _ 131	
2-Butanone (MEK)	ND		25.0	22.6		ug/L		90	48 - 140	
Carbon tetrachloride	ND		25.0	29.9		ug/L		120	60 - 150	
Chlorobenzene	ND		25.0	24.8		ug/L		99	70 - 130	
Chloroethane	ND		25.0	28.1		ug/L		112	68 - 130	
Chloroform	ND		25.0	28.5		ug/L		114	70 - 130	
Chloromethane	ND		25.0	29.8		ug/L		119	39 - 144	
2-Chlorotoluene	ND		25.0	27.7		ug/L		111	70 _ 130	
4-Chlorotoluene	ND		25.0	28.6		ug/L		114	70 - 130	
cis-1,2-Dichloroethene	ND		25.0	26.6		ug/L		107	70 - 130	
cis-1,3-Dichloropropene	ND		25.0	27.3		ug/L		109	70 - 133	
Dibromochloromethane	ND		25.0	28.0		ug/L		112	70 - 148	
1,2-Dibromo-3-Chloropropane	ND		25.0	24.5		ug/L		98	48 - 140	
1,2-Dibromoethane (EDB)	ND		25.0	26.6		ug/L		106	70 - 131	
Dibromomethane	ND		25.0	26.5		ug/L		106	70 - 130	
1,2-Dichlorobenzene	ND		25.0	28.3		ug/L		113	70 - 130	
1,3-Dichlorobenzene	ND		25.0	27.8		ug/L		111	70 - 130	
1,4-Dichlorobenzene	ND		25.0	27.9		ug/L		112	70 - 130	
Dichlorodifluoromethane	ND		25.0	29.6		ug/L		118	25 - 142	
1,1-Dichloroethane	ND		25.0	29.3		ug/L		117	65 - 130	
1,2-Dichloroethane	ND		25.0	30.5		ug/L		122	56 - 146	
1,1-Dichloroethene	ND		25.0	28.3		ug/L		113	70 - 130	
1,2-Dichloropropane	ND.		25.0	28.3		ug/L		113	69 - 130	
1,3-Dichloropropane	ND		25.0	25.3		ug/L		101	70 - 130	
2,2-Dichloropropane	ND		25.0	30.5		ug/L		122	69 - 138	
1,1-Dichloropropene	ND		25.0	28.5		ug/L		114	64 - 130	
Ethylbenzene	ND		25.0	25.9		ug/L		104	70 - 130	
Hexachlorobutadiene	ND		25.0	26.5		ug/L		104	10 - 150	
Isopropylbenzene	ND		25.0	27.2		ug/L		109	70 - 132	
Methylene Chloride	ND		25.0	26.3		ug/L		105	52 ₋ 130	
Methyl-t-Butyl Ether (MTBE)	1.1		25.0	28.9		ug/L		111	70 - 130	
m,p-Xylene	ND		25.0	26.3		ug/L		105	70 - 133	
Naphthalene	ND		25.0	23.1		ug/L		93	60 ₋ 140	
n-Butylbenzene	ND		25.0	27.2		ug/L		109	61 - 149	
N-Propylbenzene				28.9				115	66 - 135	
o-Xylene	ND ND		25.0 25.0	25.8		ug/L ug/L		103	70 - 133	
•	ND ND			27.3		_				
p-Isopropyltoluene			25.0			ug/L		109	70 - 130	
sec-Butylbenzene	ND		25.0	27.0		ug/L		108	67 ₋ 134	
Styrene	ND		25.0	25.3		ug/L		101	29 - 150	
tert-Butylbenzene	ND		25.0	27.2		ug/L		109	70 - 130	
1,1,1,2-Tetrachloroethane	ND		25.0	26.4		ug/L		106	60 - 149	
1,1,2,2-Tetrachloroethane	ND		25.0	25.1		ug/L		100	63 - 130	
Tetrachloroethene Toluene	ND ND		25.0 25.0	26.6 25.3		ug/L		106	70 ₋ 137 70 ₋ 130	

TestAmerica Irvine

4

6

Q

10

11

13

14

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-219838-A-1 MS

Matrix: Water

Analysis Batch: 499147

Client Sample ID: Matrix Spike Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,2-Dichloroethene	ND		25.0	24.4		ug/L		98	70 - 130	
trans-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	70 - 138	
1,2,3-Trichlorobenzene	ND		25.0	25.0		ug/L		100	60 _ 140	
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140	
1,1,1-Trichloroethane	ND		25.0	30.8		ug/L		123	70 _ 130	
1,1,2-Trichloroethane	ND		25.0	27.4		ug/L		109	70 - 130	
Trichloroethene	ND		25.0	28.9		ug/L		116	70 _ 130	
Trichlorofluoromethane	ND		25.0	29.9		ug/L		120	60 _ 150	
1,2,3-Trichloropropane	ND		25.0	26.0		ug/L		104	60 - 130	
1,2,4-Trimethylbenzene	ND		25.0	26.6		ug/L		106	70 - 130	
1.3.5-Trimethylbenzene	ND		25.0	27.8		ua/l		111	70 - 130	

29.3

ug/L

25.0

MS MS

ND

ND

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	103		76 - 132
Toluene-d8 (Surr)	96		80 - 128

Lab Sample ID: 440-219838-A-1 MSD

Matrix: Water

1,1-Dichloroethane

Vinyl chloride

Analysis Batch: 499147

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

50 - 137

117

RPD MSD MSD %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Unit ND 25.0 20 Benzene 25.1 100 66 - 130 ug/L 5 Bromobenzene ND 25.0 26.6 ug/L 106 70 - 130 20 Bromochloromethane ND 25.0 26.8 ug/L 107 70 - 130 6 25 Bromodichloromethane ND 25.0 28.7 ug/L 115 70 - 138 20 Bromoform ND 25.0 27.5 110 25 ug/L 59 - 150 ND 25.0 107 Bromomethane 26.8 ug/L 62 _ 131 25 2-Butanone (MEK) ND 25.0 23.6 ug/L 94 48 - 140 40 Carbon tetrachloride ND 25.0 27.6 ug/L 110 60 - 150 25 Chlorobenzene ND 25.0 70 - 130 20 25.8 ug/L 103 Chloroethane ND 25.0 25.9 ug/L 104 68 - 130 25 Chloroform ND 25.0 26.8 ug/L 107 70 - 130 20 Chloromethane NΠ 25.0 27 1 108 39 - 144 10 25 ug/L 2-Chlorotoluene ND 25.0 25.1 ug/L 101 70 - 130 10 20 ND 26.5 106 4-Chlorotoluene 25.0 70 - 130 20 ug/L cis-1,2-Dichloroethene ND 25.0 24.4 ug/L 97 70 - 130 20 ug/L cis-1,3-Dichloropropene ND 25.0 27.8 70 - 133 2 20 111 Dibromochloromethane ND 25.0 28.7 ug/L 115 70 - 148 2 25 1,2-Dibromo-3-Chloropropane ND 25.0 24.1 ug/L 97 48 - 140 2 30 ND 25.0 70 - 131 25 1,2-Dibromoethane (EDB) 28.3 ug/L 113 Dibromomethane ND 25.0 25.1 ug/L 101 70 - 130 25 25.0 26.6 106 20 1,2-Dichlorobenzene ND ug/L 70 - 130 1,3-Dichlorobenzene ND 25.0 26.1 104 70 - 130 20 ug/L 103 ND 25.0 25.8 1.4-Dichlorobenzene ug/L 70 - 130 20 Dichlorodifluoromethane ND 25.0 28.5 ug/L 114 25 - 142 30

TestAmerica Irvine

Page 34 of 48

28.3

ug/L

113

65 - 130

25.0

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Lab Sample ID: 440-219838-A-1 MSD

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Analysis Batch: 499147

Analysis Batch: 499147	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dichloroethane	ND		25.0	29.9	-	ug/L		120	56 - 146	2	20
1,1-Dichloroethene	ND		25.0	26.3		ug/L		105	70 - 130	7	20
1,2-Dichloropropane	ND		25.0	26.9		ug/L		108	69 - 130	5	20
1,3-Dichloropropane	ND		25.0	27.1		ug/L		108	70 - 130	7	25
2,2-Dichloropropane	ND		25.0	28.8		ug/L		115	69 - 138	6	25
1,1-Dichloropropene	ND		25.0	27.5		ug/L		110	64 - 130	3	20
Ethylbenzene	ND		25.0	26.1		ug/L		104	70 - 130	1	20
Hexachlorobutadiene	ND		25.0	25.6		ug/L		102	10 - 150	3	20
Isopropylbenzene	ND		25.0	26.8		ug/L		107	70 - 132	2	20
Methylene Chloride	ND		25.0	26.1		ug/L		104	52 - 130	1	20
Methyl-t-Butyl Ether (MTBE)	1.1		25.0	28.7		ug/L		111	70 - 130	1	25
m,p-Xylene	ND		25.0	27.1		ug/L		108	70 - 133	3	25
Naphthalene	ND		25.0	22.7		ug/L		91	60 - 140	2	30
n-Butylbenzene	ND		25.0	24.1		ug/L		96	61 - 149	12	20
N-Propylbenzene	ND		25.0	25.8		ug/L		103	66 - 135	11	20
o-Xylene	ND		25.0	26.9		ug/L		108	70 - 133	4	20
p-Isopropyltoluene	ND		25.0	25.7		ug/L		103	70 - 130	6	20
sec-Butylbenzene	ND		25.0	25.0		ug/L		100	67 - 134	8	20
Styrene	ND		25.0	25.2		ug/L		101	29 - 150	0	35
tert-Butylbenzene	ND		25.0	25.2		ug/L		101	70 - 130	8	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.9		ug/L		112	60 - 149	6	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.9		ug/L		99	63 _ 130	1	30
Tetrachloroethene	ND		25.0	25.2		ug/L		101	70 - 137	6	20
Toluene	ND		25.0	26.0		ug/L		104	70 - 130	3	20
trans-1,2-Dichloroethene	ND		25.0	23.1		ug/L		92	70 - 130	6	20
trans-1,3-Dichloropropene	ND		25.0	28.5		ug/L		114	70 - 138	4	25
1,2,3-Trichlorobenzene	ND		25.0	22.8		ug/L		91	60 - 140	9	20
1,2,4-Trichlorobenzene	ND		25.0	23.9		ug/L		96	60 - 140	6	20
1,1,1-Trichloroethane	ND		25.0	28.5		ug/L		114	70 - 130	8	20
1,1,2-Trichloroethane	ND		25.0	28.3		ug/L		113	70 - 130	3	25
Trichloroethene	ND		25.0	28.3		ug/L		113	70 - 130	2	20
Trichlorofluoromethane	ND		25.0	27.7		ug/L		111	60 - 150	8	25
1,2,3-Trichloropropane	ND		25.0	25.6		ug/L		102	60 - 130	1	30
1,2,4-Trimethylbenzene	ND		25.0	24.7		ug/L		99	70 - 130	8	25
1,3,5-Trimethylbenzene	ND		25.0	25.7		ug/L		103	70 - 130	8	20
Vinyl chloride	ND		25.0	27.7		ug/L		111	50 - 137	6	30

MSD	MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	99		76 - 132
Toluene-d8 (Surr)	100		80 - 128

TestAmerica Irvine

6

8

10

40

13

14

10

RPD

Client: Parsons Corporation

Analysis Batch: 498996

4-Bromofluorobenzene (Surr)

4-Bromofluorobenzene (Surr)

4-Bromofluorobenzene (Surr)

Matrix: Solid

Analyte

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: MB 440-498996/5

TestAmerica Job ID: 440-219730-1

Method: 8015B - Gasoline Range Organics - (GC)

Client Sample ID: Method Blank

09/14/18 11:04

Prep Type: Total/NA

мв мв RL Result Qualifier MDL Unit D Analyzed Dil Fac Prepared 400 09/14/18 11:04 ND 150 ug/Kg

GRO (C4-C12) MB MB Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed

65 - 140

4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 440-498996/3 Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid Analysis Batch: 498996

103

110

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit %Rec

GRO (C4-C12) 1600 91 70 - 135 1460 ug/Kg LCS LCS Surrogate %Recovery Qualifier Limits

65 - 140

Lab Sample ID: LCSD 440-498996/4 Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 498996 LCSD LCSD %Rec. Spike

Added RPD Result Qualifier Unit %Rec Limits Limit GRO (C4-C12) 1600 1480 ug/Kg 70 - 135 20

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 106 65 - 140

Lab Sample ID: 440-219975-E-9 MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 498996

88

97

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits GRO (C4-C12) ND 1600 1380 ug/Kg 86 60 - 140

MS MS %Recovery Surrogate Qualifier Limits

Lab Sample ID: 440-219975-E-9 MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA

65 - 140

65 - 140

Analysis Batch: 498996 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits RPD Limit

GRO (C4-C12) ND 1600 1370 ug/Kg 85 60 - 140 30 MSD MSD Surrogate %Recovery Qualifier Limits

TestAmerica Irvine

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: MB 440-499265/30

Matrix: Water

Analysis Batch: 499265

мв мв

Result Qualifier RLMDL Unit D Analyzed Dil Fac Analyte Prepared 50 GRO (C4-C12) ND 25 ug/L 09/16/18 10:12

MB MB

Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed 65 - 140 09/16/18 10:12 4-Bromofluorobenzene (Surr) 94

Lab Sample ID: LCS 440-499265/28

Matrix: Water

Analysis Batch: 499265

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit %Rec GRO (C4-C12) 800 ug/L 87 80 - 120 697

LCS LCS

Surrogate %Recovery Qualifier Limits 65 - 140 4-Bromofluorobenzene (Surr) 106

Lab Sample ID: 440-220206-A-1 MS

Matrix: Water

Analysis Batch: 499265

MS MS %Rec. Sample Sample Spike Qualifier Added Analyte Result Result Qualifier Unit %Rec Limits GRO (C4-C12) ND 800 611 76 65 - 140 ug/L

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 110 65 - 140

Lab Sample ID: 440-220206-A-1 MSD

Matrix: Water

Analysis Batch: 499265

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit GRO (C4-C12) ND 800 630 ug/L 79 65 - 140

MSD MSD

%Recovery Surrogate Qualifier Limits 4-Bromofluorobenzene (Surr) 107 65 - 140

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-498584/1-A

Matrix: Water

Analysis Batch: 498686

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 498584

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac DRO (C13-C22) ND 0.50 0.25 mg/L 09/12/18 11:15 09/12/18 20:12 09/12/18 11:15 ORO (C23-C40) ND 0.50 09/12/18 20:12 0.25 mg/L

TestAmerica Irvine

Page 37 of 48

10

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 440-498584/1-A

Lab Sample ID: LCS 440-498584/2-A

Matrix: Water

Matrix: Water

Analysis Batch: 498686

Analysis Batch: 498686

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 498584

MB MB

%Recovery Qualifier Limits Prepared Surrogate Analyzed Dil Fac 09/12/18 11:15 09/12/18 20:12 n-Octacosane 62 45 - 120

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 498584

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit D %Rec C10-C28

1.00 0.603 mg/L 60 40 - 115

MDL Unit

LCS LCS

%Recovery Qualifier Limits Surrogate 45 - 120 n-Octacosane 76

Lab Sample ID: LCSD 440-498584/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Water

Analysis Batch: 498686

Prep Batch: 498584 Spike LCSD LCSD %Rec. RPD Added RPD Limit Analyte Result Qualifier Unit %Rec Limits D 3 C10-C28 1.00 0.587 mg/L 59 40 - 115 25

LCSD LCSD

%Recovery Qualifier Limits Surrogate 45 - 120 n-Octacosane 67

Lab Sample ID: MB 440-498978/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 499059

Analyzed

Prep Type: Total/NA

Dil Fac

Prep Batch: 498978

мв мв Analyte

Result Qualifier

DRO (C13-C22)	ND	5.0	2.5 mg/Kg	09/14/18 06:01	09/14/18 12:35	1
ORO (C23-C40)	2.72 J	5.0	2.5 mg/Kg	09/14/18 06:01	09/14/18 12:35	1

RL

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac n-Octacosane 81 40 - 140 09/14/18 06:01 09/14/18 12:35

53.7

mg/Kg

Lab Sample ID: LCS 440-498978/2-A

Matrix: Solid

C10-C28

Analysis Batch: 499059

Client Sample ID: Lab Control Sample

45 - 115

Prepared

81

Prep Type: Total/NA **Prep Batch: 498978**

Spike LCS LCS %Rec. Analyte babbA Result Qualifier Unit %Rec Limits

66.7

LCS LCS

%Recovery Limits Surrogate Qualifier 40 - 140 n-Octacosane 80

TestAmerica Irvine

Client Sample ID: AOC4-SV15-5

40 - 120

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

%Recovery

Lab Sample ID: 440-219730-1 MS

Matrix: Solid

Analyte

Surrogate

Analysis Batch: 499059

Prep Type: Total/NA **Prep Batch: 498978** Sample Sample Spike MS MS Result Qualifier Added Result Qualifier %Rec Limits Unit D

mg/Kg

C10-C28 65.0 3.7 J 42.5 MS MS

Qualifier

n-Octacosane 56

Lab Sample ID: 440-219730-1 MSD Client Sample ID: AOC4-SV15-5 Prep Type: Total/NA

Limits

40 - 140

Matrix: Solid

Analysis Batch: 499059

Prep Batch: 498978 Sample Sample Spike MSD MSD **RPD** Result Qualifier Added Limit Analyte Result Qualifier Limits RPD Unit %Rec C10-C28 57 30 J 64.7 40 _ 120 3.7 40.8 mg/Kg

MSD MSD Surrogate %Recovery Qualifier Limits 40 - 140 n-Octacosane 50

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-498472/1-A

Matrix: Water

Analysis Batch: 498839

Client Sample ID: Method Blank Prep Type: Total/NA

60

Prep Batch: 498472

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1
Aroclor 1221	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1
Aroclor 1232	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1
Aroclor 1242	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1
Aroclor 1248	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1
Aroclor 1254	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1
Aroclor 1260	ND		1.0	0.50	ug/L		09/12/18 05:48	09/13/18 18:45	1

MB MB

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 26 - 115 09/12/18 05:48 DCB Decachlorobiphenyl (Surr) 74 09/13/18 18:45

Lab Sample ID: LCS 440-498472/5-A

Matrix: Water

Analysis Batch: 498839

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 498472**

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Aroclor 1016 4.00 2.70 ug/L 67 50 - 115 Aroclor 1260 4.00 2.82 ug/L 70 53 - 120

LCS LCS Surrogate %Recovery Qualifier Limits 26 - 115 DCB Decachlorobiphenyl (Surr) 74

TestAmerica Irvine

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 440-219741-K-10-B MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Water** Prep Type: Total/NA **Prep Batch: 498472**

Analysis Batch: 498839

	Sample	Sample	Spike	MSD	MSD				%Rec.			RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	- 1	RPD	Limit	
Aroclor 1016	ND		4.26	2.96		ug/L	 _	70	45 - 120		1	30	
Aroclor 1260	ND		4.26	3.17		ug/L		74	55 - 125		6	30	

MSD MSD

%Recovery Qualifier Surrogate I imits DCB Decachlorobiphenyl (Surr) 26 - 115 76

Lab Sample ID: 440-219741-L-10-A MS Client Sample ID: Matrix Spike

Matrix: Water

Analysis Batch: 498839									Prep	Batch: 498472
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aroclor 1016	ND		4.35	2.99		ug/L		69	45 - 120	
Aroclor 1260	ND		4.35	3.25		ug/L		75	55 - 125	

MS MS Surrogate %Recovery Qualifier Limits DCB Decachlorobiphenyl (Surr) 75 26 - 115

ND

ND

Lab Sample ID: MB 440-498981/1-A

Matrix: Solid

Analysis Batch: 499072								Prep Batch:	498981
_	MB	MB						•	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		09/14/18 06:16	09/14/18 14:10	1
Aroclor 1221	ND		50	17	ug/Kg		09/14/18 06:16	09/14/18 14:10	1
Aroclor 1232	ND		50	17	ug/Kg		09/14/18 06:16	09/14/18 14:10	1
Aroclor 1242	ND		50	17	ug/Kg		09/14/18 06:16	09/14/18 14:10	1
Aroclor 1248	ND		50	17	ug/Kg		09/14/18 06:16	09/14/18 14:10	1

50

50

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	95		45 - 120	09/14/18 06:16	09/14/18 14:10	1

Matrix: Solid

Aroclor 1254

Aroclor 1260

Analysis Batch: 499072

Lab Sample ID: LCS 440-498981/2-A

		Prep Type: Total/NA
		Prep Batch: 498981
Spike	LCS LCS	%Rec.

09/14/18 06:16

09/14/18 06:16

17 ug/Kg

17 ug/Kg

Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits
Aroclor 1016	267	235	ug/Kg		88	65 _ 115
Aroclor 1260	267	241	ug/Kg		90	65 - 115

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	95	45 - 120

10

Prep Type: Total/NA

Client Sample ID: Method Blank

09/14/18 14:10

09/14/18 14:10

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 440-219944-B-1-D MS	Client Sample ID: Matrix Spike
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 499072	Prep Batch: 498981

Sample Sample Spike MS MS %Rec. Result Qualifier Added Limits Analyte Result Qualifier Unit %Rec Aroclor 1016 264 73 50 - 120 ND 193 ug/Kg Aroclor 1260 ND 264 188 71 50 - 125 ug/Kg

MS MS Surrogate %Recovery Qualifier Limits DCB Decachlorobiphenyl (Surr) 68 45 - 120

Lab Sample ID: 440-219944-B-1-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA Analysis Batch: 499072 Prep Batch: 498981 Sample Sample Spike MSD MSD RPD %Rec.

Analyte Result Qualifier Result Qualifier Limit Added Unit %Rec Limits RPD Aroclor 1016 ND 262 204 78 50 - 120 5 30 ug/Kg Aroclor 1260 ND 262 177 67 ug/Kg 50 - 125 6 30 MSD MSD

Surrogate %Recovery Qualifier Limits DCB Decachlorobiphenyl (Surr) 88 45 - 120

QC Association Summary

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA TestAmerica Job ID: 440-219730-1

GC/MS VOA

Analysis Batch: 498992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	8260B	499060
440-219730-2	AOC4-SV15-15	Total/NA	Solid	8260B	499060
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	8260B	499060
440-219730-4	AOC4-SV14-5	Total/NA	Solid	8260B	499060
440-219730-5	AOC4-SV14-15	Total/NA	Solid	8260B	499060
MB 440-498992/4	Method Blank	Total/NA	Solid	8260B	
LCS 440-498992/5	Lab Control Sample	Total/NA	Solid	8260B	
440-219566-A-4 MS	Matrix Spike	Total/NA	Solid	8260B	
440-219566-A-4 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	

Prep Batch: 499060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	5035	
440-219730-2	AOC4-SV15-15	Total/NA	Solid	5035	
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	5035	
440-219730-4	AOC4-SV14-5	Total/NA	Solid	5035	
440-219730-5	AOC4-SV14-15	Total/NA	Solid	5035	

Analysis Batch: 499147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-6	EB-1	Total/NA	Water	8260B	
MB 440-499147/4	Method Blank	Total/NA	Water	8260B	
LCS 440-499147/5	Lab Control Sample	Total/NA	Water	8260B	
440-219838-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-219838-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 498996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	8015B	
440-219730-2	AOC4-SV15-15	Total/NA	Solid	8015B	
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	8015B	
440-219730-4	AOC4-SV14-5	Total/NA	Solid	8015B	
440-219730-5	AOC4-SV14-15	Total/NA	Solid	8015B	
MB 440-498996/5	Method Blank	Total/NA	Solid	8015B	
LCS 440-498996/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-498996/4	Lab Control Sample Dup	Total/NA	Solid	8015B	
440-219975-E-9 MS	Matrix Spike	Total/NA	Solid	8015B	
440-219975-E-9 MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	

Analysis Batch: 499265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-6	EB-1	Total/NA	Water	8015B	
MB 440-499265/30	Method Blank	Total/NA	Water	8015B	
LCS 440-499265/28	Lab Control Sample	Total/NA	Water	8015B	
440-220206-A-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-220206-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	

TestAmerica Irvine

Page 42 of 48

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

GC Semi VOA

Prep Batch: 498472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-6	EB-1	Total/NA	Water	3510C	
MB 440-498472/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-498472/5-A	Lab Control Sample	Total/NA	Water	3510C	
440-219741-K-10-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
440-219741-L-10-A MS	Matrix Spike	Total/NA	Water	3510C	

Prep Batch: 498584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-6	EB-1	Total/NA	Water	3510C	
MB 440-498584/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-498584/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-498584/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 498686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-6	EB-1	Total/NA	Water	8015B	498584
MB 440-498584/1-A	Method Blank	Total/NA	Water	8015B	498584
LCS 440-498584/2-A	Lab Control Sample	Total/NA	Water	8015B	498584
LCSD 440-498584/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	498584

Analysis Batch: 498839

Lab S	ample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	19730-6	EB-1	Total/NA	Water	8082	498472
=	40-498472/1-A	Method Blank	Total/NA	Water	8082	498472
	140-498472/5-A	Lab Control Sample	Total/NA	Water	8082	498472
440-2	19741-K-10-B MSD	Matrix Spike Duplicate	Total/NA	Water	8082	498472
440-2	19741-L-10-A MS	Matrix Spike	Total/NA	Water	8082	498472

Prep Batch: 498978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	3546	<u> </u>
440-219730-2	AOC4-SV15-15	Total/NA	Solid	3546	
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	3546	
440-219730-4	AOC4-SV14-5	Total/NA	Solid	3546	
440-219730-5	AOC4-SV14-15	Total/NA	Solid	3546	
MB 440-498978/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-498978/2-A	Lab Control Sample	Total/NA	Solid	3546	
440-219730-1 MS	AOC4-SV15-5	Total/NA	Solid	3546	
440-219730-1 MSD	AOC4-SV15-5	Total/NA	Solid	3546	

Prep Batch: 498981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	3546	_
440-219730-2	AOC4-SV15-15	Total/NA	Solid	3546	
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	3546	
440-219730-4	AOC4-SV14-5	Total/NA	Solid	3546	
440-219730-5	AOC4-SV14-15	Total/NA	Solid	3546	
MB 440-498981/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-498981/2-A	Lab Control Sample	Total/NA	Solid	3546	
440-219944-B-1-D MS	Matrix Spike	Total/NA	Solid	3546	
440-219944-B-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

TestAmerica Irvine

Page 43 of 48

QC Association Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Analysis Batch: 499059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	8015B	498978
440-219730-2	AOC4-SV15-15	Total/NA	Solid	8015B	498978
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	8015B	498978
440-219730-4	AOC4-SV14-5	Total/NA	Solid	8015B	498978
440-219730-5	AOC4-SV14-15	Total/NA	Solid	8015B	498978
MB 440-498978/1-A	Method Blank	Total/NA	Solid	8015B	498978
LCS 440-498978/2-A	Lab Control Sample	Total/NA	Solid	8015B	498978
440-219730-1 MS	AOC4-SV15-5	Total/NA	Solid	8015B	498978
440-219730-1 MSD	AOC4-SV15-5	Total/NA	Solid	8015B	498978

Analysis Batch: 499072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-498981/1-A	Method Blank	Total/NA	Solid	8082	498981
LCS 440-498981/2-A	Lab Control Sample	Total/NA	Solid	8082	498981
440-219944-B-1-D MS	Matrix Spike	Total/NA	Solid	8082	498981
440-219944-B-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	498981

Analysis Batch: 499348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-219730-1	AOC4-SV15-5	Total/NA	Solid	8082	498981
440-219730-2	AOC4-SV15-15	Total/NA	Solid	8082	498981
440-219730-3	AOC4-SV15-15D	Total/NA	Solid	8082	498981
440-219730-4	AOC4-SV14-5	Total/NA	Solid	8082	498981
440-219730-5	AOC4-SV14-15	Total/NA	Solid	8082	498981

3

6

_

9

10

11

10

14

Definitions/Glossary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
+	1.00 - 1.00D to 1.111 1.11

LCS or LCSD is outside acceptance limits.

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier **Qualifier Description**

Surrogate is outside control limits

GC Semi VOA

В Compound was found in the blank and sample.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly	y used abbreviations may	y or may not be	present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac

Detection Limit (DoD/DOE) DL

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

MDA Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit MLMinimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

m,p-Xylene

m,p-Xylene

Client: Parsons Corporation

8260B

8260B

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-219730-1

Laboratory: TestAmerica Irvine

5035

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Program	EPA Region	Identification Number	Expiration Date
State Program	9	CA ELAP 2706	06-30-19
ed in this report, but the laboratory is	not certified by the governi	ng authority. This list may incl	ude analytes for whic
	State Program	State Program 9	

Analysis Method	Prep Method	Matrix	Analyte	
8015B		Solid	GRO (C4-C12)	
8015B		Water	GRO (C4-C12)	
8015B	3510C	Water	DRO (C13-C22)	
8015B	3510C	Water	ORO (C23-C40)	
8015B	3546	Solid	DRO (C13-C22)	
9015D	3546	Solid	OPO (C33 C40)	

Water

Solid

4

5

0

8

10

11

13

14

TESTAMENICO THE LEADER IN ENVIRONMENTAL TESTING (2) TestAmerica Laboratories, Inc.	210 (0713)	Sampler of COCs in	For Lab Only:	Lab Sampling.	Job / SDG No .	Sample Specific Notes	en∃ en∃				λp	neto	Jo to	Chair	0826)PP		(ained longer than 1 month)	forMonths			Tay 9/10/19 11 37	Date/Time ,	7/0/3 1330	
206568	Date: 😝 10 18	Carrier: 7																issessed if samples are ret	Disposal by Lab	1	ý	Test Americate		14-1RJ	
of Cust	Site Contact: Jush h 14m		ପ୍ତ	108 N/X	808 100 100 100 100 100 100 100 100 100	Filtered Sar	×	XXX	XXX	NXX	ムケメ	<u> </u>	*					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	Return to Client		<u>ē</u>	A Adonis Agkis	Received in Jaboratory by:		
Chain	anager: Testile	626-440	CALENDAR DAYS WORKING DAYS	TAT if different from Below 512	1 week 2 days 1 day	Sample Time	810 6 5 5	915 G 5 5	915 6 5 5	830 6 5 5	1100 G S 5	1030 6 W 9	AA				6= Other	EPA Waste Codes for the sample in the	B Juknown		eal No · Date/Time:	6	エPV G/10/1은 Date/Time		
rvine Fax:	act	Tel/Fax:	A 91124 CALEN		Scho)	Sample Date	7.5 Albily	1-15	15D	.5	11	17	50				1= ice, 2= HCi; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other	Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to discose of the sample	Flammable Skin Imfant Poison B	irements & Comments:		hair letted Parsons	19Kir Test A		
TestAmerica Irvine 17461 Berian Ave Svite 100 Irvine, CA 92614 Phone: 949.261.1822 Fax:	Client Contact	Company Name 74(SOAS	te/Z	044-9	Site: Reseda Hah	Sample Identification	AOC4-SVIS	A0C 4 - SV 1S	A0C4-SV15	- HOCH-SVIH	# 40C4-SV14-	1-83	27 F of 4	8			Preservation Used: 1= Ice, 2	Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Comments Section if the lab is to dispose of the sample	Non-Hazard	Special Instructions/QC Requirements & Comments:	Custody Seals Intact:	Veer.	Clo, 23	3/2018	3

Client: Parsons Corporation

Job Number: 440-219730-1

Login Number: 219730 List Source: TestAmerica Irvine

List Number: 1

Creator: Skinner, Alma D

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
OC is present.	True	
OC is filled out in ink and legible.	True	
OC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
ere are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
mples are received within Holding Time (excluding tests with immediate s)	True	
mple containers have legible labels.	True	
ntainers are not broken or leaking.	True	
mple collection date/times are provided.	True	
propriate sample containers are used.	True	
ample bottles are completely filled.	True	
ample Preservation Verified.	N/A	
nere is sufficient vol. for all requested analyses, incl. any requested S/MSDs	True	
ontainers requiring zero headspace have no headspace or bubble is mm (1/4").	True	
ultiphasic samples are not present.	True	
amples do not require splitting or compositing.	True	
esidual Chlorine Checked.	N/A	

TestAmerica Irvine



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine 17461 Derian Ave Suite 100

Irvine, CA 92614-5817 Tel: (949)261-1022

TestAmerica Job ID: 440-221644-1

Client Project/Site: LAUSD Reseda H.S., CA

For:

Parsons Corporation 100 W Walnut Street Pasadena, California 91124

Attn: Justin King

Palmota

Authorized for release by: 10/15/2018 3:08:43 PM

Patty Mata, Senior Project Manager (949)261-1022

patty.mata@testamericainc.com

..... LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
Surrogate Summary	20
Method Summary	
_ab Chronicle	24
QC Sample Results	26
QC Association Summary	45
Definitions/Glossary	48
Certification Summary	49
Chain of Custody	50
Receint Checklists	51

11

12

14

Sample Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-221644-1	AOC4-SV17-5	Solid	10/06/18 08:47	10/06/18 14:05
440-221644-2	AOC4-SV17-15	Solid	10/06/18 09:06	10/06/18 14:05
440-221644-3	TB-20181006	Water	10/06/18 10:15	10/06/18 14:05
440-221644-4	AOC4-SV16-5	Solid	10/06/18 10:24	10/06/18 14:05
440-221644-5	AOC4-SV16-5D	Solid	10/06/18 10:30	10/06/18 14:05
440-221644-6	AOC4-SV16-15	Solid	10/06/18 10:45	10/06/18 14:05
440-221644-7	EB-20181006	Water	10/06/18 11:00	10/06/18 14:05

3

Δ

5

6

8

9

11

12

11

Case Narrative

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Job ID: 440-221644-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative 440-221644-1

Comments

No additional comments.

Receipt

The samples were received on 10/6/2018 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-504060 and analytical batch 440-504496. The laboratory control sample (LCS) was performed in duplicate to provide precision data for the batch.

Method(s) 8082: Surrogate recovery for the following sample was outside control limits: AOC4-SV17-5 (440-221644-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-503698 and analytical batch 440-504021. The laboratory control sample (LCS) was performed in duplicate to provide precision data for the batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

4

0

6

9

10

12

IR

4 6

RL

5.0

5.0

MDL Unit

2.5 mg/Kg

2.5 mg/Kg

Client Sample ID: AOC4-SV17-5

Client Sample ID: AOC4-SV17-15

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-1

 Dil Fac
 D
 Method
 Prep Type

 1
 8015B
 Total/NA

 1
 8015B
 Total/NA

Lab Sample ID: 440-221644-2

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 Dil Fac
 D
 Method
 Prep Type

 ORO (C23-C40)
 3.4
 J
 5.0
 2.5
 mg/Kg
 1
 8015B
 Total/NA

Result Qualifier

3.5 J

10

Client Sample ID: TB-20181006 Lab Sample ID: 440-221644-3

No Detections.

Analyte

DRO (C13-C22)

ORO (C23-C40)

Client Sample ID: AOC4-SV16-5 Lab Sample ID: 440-221644-4

Client Sample ID: AOC4-SV16-5D Lab Sample ID: 440-221644-5

 $\frac{\text{Analyte}}{\text{ORO (C23-C40)}} \qquad \frac{\text{Result}}{6.5} \qquad \frac{\text{Qualifier}}{5.0} \qquad \frac{\text{RL}}{5.0} \qquad \frac{\text{MDL}}{2.5} \qquad \frac{\text{Unit}}{\text{mg/Kg}} \qquad \frac{\text{Dil Fac}}{1} \qquad \frac{\text{D}}{8015B} \qquad \frac{\text{Prep Type}}{\text{Total/NA}}$

Client Sample ID: AOC4-SV16-15 Lab Sample ID: 440-221644-6

Client Sample ID: EB-20181006 Lab Sample ID: 440-221644-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Irvine

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-1

Matrix: Solid

Client Sample ID: AOC4-SV17-5

Date Collected: 10/06/18 08:47 Date Received: 10/06/18 14:05

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Bromobenzene	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Bromochloromethane	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Bromodichloromethane	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Bromoform	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 11:46	
2-Butanone (MEK)	ND	9.4	4.7	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Carbon tetrachloride	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Chlorobenzene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Chloroethane	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Chloroform	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Chloromethane	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
2-Chlorotoluene	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1-Chlorotoluene	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
sis-1,2-Dichloroethene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
sis-1,3-Dichloropropene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Dibromochloromethane	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,2-Dibromo-3-Chloropropane	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,2-Dibromoethane (EDB)	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Dibromomethane	ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,2-Dichlorobenzene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,3-Dichlorobenzene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,4-Dichlorobenzene	ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
Dichlorodifluoromethane	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,1-Dichloroethane	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,2-Dichloroethane	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,1-Dichloroethene	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,2-Dichloropropane	ND	1.9	0.94	ug/Kg ug/Kg		10/06/18 20:00	10/09/18 11:46	
	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
I ,3-Dichloropropane 2,2-Dichloropropane	ND	1.9	0.94	ug/Kg ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,1-Dichloropropene	ND	1.9	0.94	ug/Kg ug/Kg		10/06/18 20:00	10/09/18 11:46	
	ND	1.9	0.94			10/06/18 20:00	10/09/18 11:46	
Ethylbenzene Hexachlorobutadiene	ND	4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
				ug/Kg				
sopropylbenzene	ND ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
Methylene Chloride	ND ND	19		ug/Kg		10/06/18 20:00	10/09/18 11:46 10/09/18 11:46	
Methyl-t-Butyl Ether (MTBE)	ND	4.7		ug/Kg		10/06/18 20:00		
n,p-Xylene	ND	3.8		ug/Kg		10/06/18 20:00	10/09/18 11:46	
Naphthalene	ND	4.7		ug/Kg		10/06/18 20:00	10/09/18 11:46	
n-Butylbenzene	ND	4.7		ug/Kg		10/06/18 20:00	10/09/18 11:46	
N-Propylbenzene	ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
o-Xylene	ND	1.9	0.94			10/06/18 20:00	10/09/18 11:46	
o-Isopropyltoluene	ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
sec-Butylbenzene	ND	4.7	0.94			10/06/18 20:00	10/09/18 11:46	
Styrene	ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
ert-Butylbenzene	ND	4.7		ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,1,1,2-Tetrachloroethane	ND	4.7		ug/Kg		10/06/18 20:00	10/09/18 11:46	
I,1,2,2-Tetrachloroethane	ND	1.9		ug/Kg		10/06/18 20:00	10/09/18 11:46	
Γetrachloroethene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Γoluene	ND	1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	

TestAmerica Irvine

2

_

O

R

9

12

13

14

Client: Parsons Corporation

Date Collected: 10/06/18 08:47 Date Received: 10/06/18 14:05

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV17-5

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-1

 22.0
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
trans-1,3-Dichloropropene	ND		1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,2,3-Trichlorobenzene	ND		4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,2,4-Trichlorobenzene	ND		4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,1,1-Trichloroethane	ND		1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,1,2-Trichloroethane	ND		1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Trichloroethene	ND		1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Trichlorofluoromethane	ND		4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,2,3-Trichloropropane	ND		9.4	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,2,4-Trimethylbenzene	ND		1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
1,3,5-Trimethylbenzene	ND		1.9	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Vinyl chloride	ND		4.7	0.94	ug/Kg		10/06/18 20:00	10/09/18 11:46	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	112		79 - 120				10/06/18 20:00	10/09/18 11:46	
Dibromofluoromethane (Surr)	98		60 - 120				10/06/18 20:00	10/09/18 11:46	
Toluene-d8 (Surr)	100		79 - 123				10/06/18 20:00	10/09/18 11:46	
Method: 8015B - Gasoline Rai	nge Organics - (G	C)							
		0)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
•	Result ND	•	RL 400		Unit ug/Kg	<u>D</u>	Prepared	Analyzed 10/14/18 12:15	Dil Fa
Analyte GRO (C4-C12) Surrogate		Qualifier				<u>D</u>	Prepared Prepared		
GRO (C4-C12)	ND ND	Qualifier	400			<u>D</u>	<u> </u>	10/14/18 12:15	
GRO (C4-C12) Surrogate 4-Bromofluorobenzene (Surr)	%Recovery 91 • Organics (DRO)	Qualifier Qualifier (GC)	400			<u>D</u>	<u> </u>	10/14/18 12:15 Analyzed	Dil Fa
GRO (C4-C12) Surrogate 4-Bromofluorobenzene (Surr) Method: 8015B - Diesel Range	%Recovery 91 e Organics (DRO) Result	Qualifier Qualifier	400 Limits 65 - 140	150 MDL	ug/Kg Unit	<u>D</u>	<u> </u>	10/14/18 12:15 Analyzed	Dil Fa
GRO (C4-C12) Surrogate 4-Bromofluorobenzene (Surr) Method: 8015B - Diesel Range Analyte	%Recovery 91 • Organics (DRO)	Qualifier Qualifier (GC)	400 Limits 65 - 140	150	ug/Kg		Prepared	10/14/18 12:15 Analyzed 10/14/18 12:15	Dil Fa
GRO (C4-C12) Surrogate 4-Bromofluorobenzene (Surr) Method: 8015B - Diesel Range Analyte DRO (C13-C22)	%Recovery 91 e Organics (DRO) Result	Qualifier Qualifier (GC) Qualifier	400 Limits 65 - 140	150 MDL 2.5	ug/Kg Unit		Prepared Prepared	10/14/18 12:15 Analyzed 10/14/18 12:15 Analyzed	Dil Fa
GRO (C4-C12) Surrogate	%Recovery 91 e Organics (DRO) Result 3.5	Qualifier Qualifier (GC) Qualifier J	400 Limits 65 - 140 RL 5.0	150 MDL 2.5	ug/Kg Unit mg/Kg		Prepared 10/11/18 06:50	10/14/18 12:15 Analyzed 10/14/18 12:15 Analyzed 10/11/18 16:30	Dil Fa

Analyte	Result Qualifier	r RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Aroclor 1221	ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Aroclor 1232	ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Aroclor 1242	ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Aroclor 1248	ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Aroclor 1254	ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Aroclor 1260	ND	50	17	ug/Kg		10/11/18 07:11	10/12/18 14:42	1
Surrogate	%Recovery Qualifie	r Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	41 X	45 - 120				10/11/18 07:11	10/12/18 14:42	1

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-221644-2

TestAmerica Job ID: 440-221644-1

Matrix: Solid

Client Sample ID: AOC4-SV17-15

Date Collected: 10/06/18 09:06 Date Received: 10/06/18 14:05

Method: 8260B - Volatile Organic Analyte	Result Q		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Bromobenzene	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Bromochloromethane	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Bromodichloromethane	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Bromoform	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
2-Butanone (MEK)	ND	8.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Carbon tetrachloride	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Chlorobenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Chloroethane	ND	4.4	1.8	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Chloroform	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Chloromethane	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
2-Chlorotoluene	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
4-Chlorotoluene	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	
cis-1,2-Dichloroethene	ND	1.8		ug/Kg ug/Kg		10/06/18 20:00	10/09/18 12:13	1
cis-1,3-Dichloropropene	ND	1.8		ug/Kg ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Dibromochloromethane	ND			ug/Kg ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,2-Dibromo-3-Chloropropane	ND ND	1.8 4.4		ug/Kg ug/Kg		10/06/18 20:00	10/09/18 12:13	1
, ,								
1,2-Dibromoethane (EDB)	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Dibromomethane	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
1,2-Dichlorobenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
1,3-Dichlorobenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
1,4-Dichlorobenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Dichlorodifluoromethane	ND	4.4	1.8	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
1,1-Dichloroethane	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
1,2-Dichloroethane	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	•
1,1-Dichloroethene	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	•
1,2-Dichloropropane	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,3-Dichloropropane	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	•
2,2-Dichloropropane	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	•
1,1-Dichloropropene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Ethylbenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Hexachlorobutadiene	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Isopropylbenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Methylene Chloride	ND	18	4.4	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Methyl-t-Butyl Ether (MTBE)	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
m,p-Xylene	ND	3.5	1.8	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Naphthalene	ND	4.4	1.8	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
n-Butylbenzene	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	•
N-Propylbenzene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	•
o-Xylene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
p-Isopropyltoluene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	1
sec-Butylbenzene	ND	4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Styrene	ND	1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
tert-Butylbenzene	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
1,1,1,2-Tetrachloroethane	ND	4.4		ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,1,2,2-Tetrachloroethane	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	,
Tetrachloroethene	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
Toluene	ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	1
trans-1,2-Dichloroethene	ND ND	1.8		ug/Kg		10/06/18 20:00	10/09/18 12:13	'

TestAmerica Irvine

Client: Parsons Corporation

DCB Decachlorobiphenyl (Surr)

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Client Sample ID: AOC4-SV17-15

Lab Sample ID: 440-221644-2

Date Collected: 10/06/18 09:06

Date Received: 10/06/18 14:05

Matrix: Solid

	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
trans-1,3-Dichloropropene	ND		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,2,3-Trichlorobenzene	ND		4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,2,4-Trichlorobenzene	ND		4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,1,1-Trichloroethane	ND		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,1,2-Trichloroethane	ND		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Trichloroethene	ND		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Trichlorofluoromethane	ND		4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,2,3-Trichloropropane	ND		8.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,2,4-Trimethylbenzene	ND		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
1,3,5-Trimethylbenzene	ND		1.8	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Vinyl chloride	ND		4.4	0.88	ug/Kg		10/06/18 20:00	10/09/18 12:13	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	86		79 - 120				10/06/18 20:00	10/09/18 12:13	
Dibromofluoromethane (Surr)	102		60 - 120				10/06/18 20:00	10/09/18 12:13	
Toluene-d8 (Surr)	93		79 - 123				10/06/18 20:00	10/09/18 12:13	
Method: 8015B - Gasoline Ran	ge Organics - (G	C)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
GRO (C4-C12)	ND		400	150	ug/Kg			10/14/18 13:40	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		65 - 140					10/14/18 13:40	
Method: 8015B - Diesel Range	Organics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
DRO (C13-C22)	ND		5.0	2.5	mg/Kg		10/11/18 06:50	10/11/18 20:37	
ORO (C23-C40)	3.4	J	5.0	2.5	mg/Kg		10/11/18 06:50	10/11/18 20:37	
		0 ""					Prepared	Amalumad	Dil Fa
Surrogate	%Recovery	Qualifier	Limits				rrepareu	Analyzed	DII F
		Qualifier	40 - 140				10/11/18 06:50	10/11/18 20:37	DII Fa
n-Octacosane	64		40 - 140	у					
n-Octacosane Method: 8082 - Polychlorinated	64 d Biphenyls (PCE		40 - 140	y MDL	Unit	D			
n-Octacosane Method: 8082 - Polychlorinated Analyte	64 d Biphenyls (PCE	Bs) by Gas	40 - 140 Chromatograph	_	Unit ug/Kg	<u>D</u>	10/11/18 06:50	10/11/18 20:37	Dil Fa
n-Octacosane Method: 8082 - Polychlorinated Analyte Aroclor 1016	d Biphenyls (PCE	Bs) by Gas	40 - 140 Chromatograph RL	MDL 17		<u>D</u>	10/11/18 06:50 Prepared	10/11/18 20:37 Analyzed	Dil Fa
n-Octacosane Method: 8082 - Polychlorinated Analyte Aroclor 1016 Aroclor 1221	d Biphenyls (PCE Result ND	Bs) by Gas	40 - 140 Chromatograph RL 49	MDL 17 17	ug/Kg	<u>D</u>	10/11/18 06:50 Prepared 10/11/18 07:11	10/11/18 20:37 Analyzed 10/11/18 20:30	Dil Fa
n-Octacosane Wethod: 8082 - Polychlorinated Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232	d Biphenyls (PCE Result ND ND	Bs) by Gas	40 - 140 Chromatograph RL 49 49	MDL 17 17 17	ug/Kg ug/Kg	<u>D</u>	Prepared 10/11/18 07:11 10/11/18 07:11	10/11/18 20:37 Analyzed 10/11/18 20:30 10/11/18 20:30	Dil Fa
Method: 8082 - Polychlorinated Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242	d Biphenyls (PCE Result ND ND ND	Bs) by Gas	40 - 140 Chromatograph RL 49 49 49	MDL 17 17 17 17	ug/Kg ug/Kg ug/Kg	<u>D</u>	Prepared 10/11/18 07:11 10/11/18 07:11 10/11/18 07:11	Analyzed 10/11/18 20:30 10/11/18 20:30 10/11/18 20:30 10/11/18 20:30	Dil Fa
Method: 8082 - Polychlorinated Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248	d Biphenyls (PCE Result ND ND ND ND ND	Bs) by Gas	40 - 140 Chromatograph RL 49 49 49 49	MDL 17 17 17 17	ug/Kg ug/Kg ug/Kg ug/Kg	<u>D</u>	Prepared 10/11/18 06:50 10/11/18 07:11 10/11/18 07:11 10/11/18 07:11 10/11/18 07:11	Analyzed 10/11/18 20:37 Analyzed 10/11/18 20:30 10/11/18 20:30 10/11/18 20:30 10/11/18 20:30	Dil Fa
Surrogate n-Octacosane Method: 8082 - Polychlorinated Analyte Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	d Biphenyls (PCE Result ND ND ND ND ND ND ND ND ND	Bs) by Gas	40 - 140 Chromatograph RL 49 49 49 49 49	MDL 17 17 17 17 17 17 17	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	<u>D</u>	Prepared 10/11/18 06:50 10/11/18 07:11 10/11/18 07:11 10/11/18 07:11 10/11/18 07:11	Analyzed 10/11/18 20:37 Analyzed 10/11/18 20:30 10/11/18 20:30 10/11/18 20:30 10/11/18 20:30	

10/11/18 07:11 10/11/18 20:30

45 - 120

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Client Sample ID: TB-20181006

Date Collected: 10/06/18 10:15

Lab Sample ID: 440-221644-3

Matrix: Water

Date Received: 10/06/18 14:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.50	0.25	ug/L			10/13/18 17:16	
Bromobenzene	ND		0.50	0.25	ug/L			10/13/18 17:16	
Bromochloromethane	ND		0.50	0.25	ug/L			10/13/18 17:16	
Bromodichloromethane	ND		0.50	0.25	ug/L			10/13/18 17:16	
Bromoform	ND		1.0	0.40	ug/L			10/13/18 17:16	
Bromomethane	ND		0.50	0.25	ug/L			10/13/18 17:16	
2-Butanone (MEK)	ND		5.0		ug/L			10/13/18 17:16	
Carbon tetrachloride	ND		0.50	0.25				10/13/18 17:16	
Chlorobenzene	ND		0.50		ug/L			10/13/18 17:16	
Chloroethane	ND		1.0		ug/L			10/13/18 17:16	
Chloroform	ND		0.50		ug/L			10/13/18 17:16	
Chloromethane	ND		0.50		ug/L			10/13/18 17:16	
2-Chlorotoluene	ND		0.50		ug/L			10/13/18 17:16	
4-Chlorotoluene	ND		0.50		ug/L			10/13/18 17:16	
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/13/18 17:16	
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/13/18 17:16	
Dibromochloromethane	ND		0.50		ug/L			10/13/18 17:16	
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50				10/13/18 17:16	
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			10/13/18 17:16	
Dibromomethane	ND		0.50		ug/L			10/13/18 17:16	
1,2-Dichlorobenzene	ND		0.50		ug/L			10/13/18 17:16	
1,3-Dichlorobenzene	ND		0.50		ug/L			10/13/18 17:16	
1,4-Dichlorobenzene	ND		0.50		ug/L			10/13/18 17:16	
Dichlorodifluoromethane	ND		1.0		ug/L			10/13/18 17:16	
1,1-Dichloroethane	ND		0.50		ug/L			10/13/18 17:16	
1,2-Dichloroethane	ND		0.50		ug/L			10/13/18 17:16	
1,1-Dichloroethene	ND		0.50		ug/L			10/13/18 17:16	
1,2-Dichloropropane	ND		0.50	0.25	.			10/13/18 17:16	
1,3-Dichloropropane	ND		0.50		ug/L			10/13/18 17:16	
2,2-Dichloropropane	ND		1.0	0.40				10/13/18 17:16	
1,1-Dichloropropene	ND		0.50		ug/L			10/13/18 17:16	
Ethylbenzene	ND		0.50		ug/L			10/13/18 17:16	
Hexachlorobutadiene	ND		0.50	0.25				10/13/18 17:16	
Isopropylbenzene	ND		0.50		ug/L			10/13/18 17:16	
Methylene Chloride	ND		2.0		ug/L			10/13/18 17:16	
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			10/13/18 17:16	
m,p-Xylene	ND		1.0		ug/L			10/13/18 17:16	
Naphthalene	ND ND		1.0		ug/L			10/13/18 17:16	
•	ND ND		1.0		ug/L ug/L			10/13/18 17:16	
n-Butylbenzene									
N-Propylbenzene	ND		0.50		ug/L			10/13/18 17:16	
o-Xylene	ND		0.50		ug/L			10/13/18 17:16	
p-Isopropyltoluene	ND		0.50		ug/L			10/13/18 17:16	
sec-Butylbenzene	ND		0.50		ug/L			10/13/18 17:16	
Styrene	ND		0.50		ug/L			10/13/18 17:16	
tert-Butylbenzene	ND		0.50		ug/L			10/13/18 17:16	
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/13/18 17:16	
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/13/18 17:16	
Tetrachloroethene	ND		0.50	0.25	ug/L			10/13/18 17:16	

TestAmerica Irvine

_

1

5

9

11

13

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-221644-3

TestAmerica Job ID: 440-221644-1

Client Sample ID: TB-20181006 Date Collected: 10/06/18 10:15

Matrix: Water

Date Received: 10/06/18 14:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/13/18 17:16	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/13/18 17:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/13/18 17:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/13/18 17:16	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/13/18 17:16	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/13/18 17:16	1
Trichloroethene	ND		0.50	0.25	ug/L			10/13/18 17:16	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/13/18 17:16	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/13/18 17:16	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:16	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:16	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/13/18 17:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120			-		10/13/18 17:16	1
Dibromofluoromethane (Surr)	104		76 - 132					10/13/18 17:16	1
Toluene-d8 (Surr)	100		80 ₋ 128					10/13/18 17:16	1

Client Sample ID: AOC4-SV16-5

Lab Sample ID: 440-221644-4 Date Collected: 10/06/18 10:24

Matrix: Solid

Date Received: 10/06/18 14:05

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Bromobenzene	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Bromochloromethane	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Bromodichloromethane	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Bromoform	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
2-Butanone (MEK)	ND	9.3	4.7	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Carbon tetrachloride	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Chlorobenzene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Chloroethane	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Chloroform	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Chloromethane	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
2-Chlorotoluene	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
4-Chlorotoluene	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
cis-1,2-Dichloroethene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
cis-1,3-Dichloropropene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Dibromochloromethane	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,2-Dibromo-3-Chloropropane	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,2-Dibromoethane (EDB)	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Dibromomethane	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,2-Dichlorobenzene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,3-Dichlorobenzene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,4-Dichlorobenzene	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
Dichlorodifluoromethane	ND	4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,1-Dichloroethane	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,2-Dichloroethane	ND	1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1
1,1-Dichloroethene	ND	4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	1

TestAmerica Irvine

Client: Parsons Corporation

Date Collected: 10/06/18 10:24

Date Received: 10/06/18 14:05

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV16-5

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-4

5 Campic 15. 440-221044-4

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2-Dichloropropane	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,3-Dichloropropane	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
2,2-Dichloropropane	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,1-Dichloropropene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Ethylbenzene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Hexachlorobutadiene	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Isopropylbenzene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Methylene Chloride	ND		19	4.7	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Methyl-t-Butyl Ether (MTBE)	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
m,p-Xylene	ND		3.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Naphthalene	ND		4.7	1.9	ug/Kg		10/06/18 20:00	10/09/18 12:40	
n-Butylbenzene	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
N-Propylbenzene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
o-Xylene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
p-Isopropyltoluene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
sec-Butylbenzene	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Styrene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
tert-Butylbenzene	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,1,1,2-Tetrachloroethane	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,1,2,2-Tetrachloroethane	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Tetrachloroethene	ND		1.9		ug/Kg		10/06/18 20:00	10/09/18 12:40	
Toluene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
trans-1,2-Dichloroethene	ND		1.9		ug/Kg		10/06/18 20:00	10/09/18 12:40	
trans-1,3-Dichloropropene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,2,3-Trichlorobenzene	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,2,4-Trichlorobenzene	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,1,1-Trichloroethane	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,1,2-Trichloroethane	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Trichloroethene	ND		1.9	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Trichlorofluoromethane	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,2,3-Trichloropropane	ND		9.3	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,2,4-Trimethylbenzene	ND		1.9		ug/Kg		10/06/18 20:00	10/09/18 12:40	
1,3,5-Trimethylbenzene	ND		1.9		ug/Kg		10/06/18 20:00	10/09/18 12:40	
Vinyl chloride	ND		4.7	0.93	ug/Kg		10/06/18 20:00	10/09/18 12:40	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	92		79 - 120				10/06/18 20:00	10/09/18 12:40	
Dibromofluoromethane (Surr)	104		60 - 120				10/06/18 20:00	10/09/18 12:40	
Toluene-d8 (Surr)	93		79 - 123				10/06/18 20:00	10/09/18 12:40	

Method: 6013B -	Gasonne	Kange	Organii	55 -	(GC	,
				_		_

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		400	150	ug/Kg			10/14/18 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		65 - 140					10/14/18 14:08	1

Method:	8015B - Diese	I Range Ord	nanics ((DRO)	(GC)
Metrica.	סטוט - טונסט	FI IVALIUE OIV	iaiiico i		

moniour cores siecor runge org	u (5115) (55)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND —	5.0	2.5 mg/Kg		10/11/18 06:50	10/11/18 18:54	1

TestAmerica Irvine

Λ

C

9

11

13

14

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV16-5

Date Collected: 10/06/18 10:24 Date Received: 10/06/18 14:05 Lab Sample ID: 440-221644-4

TestAmerica Job ID: 440-221644-1

Matrix: Solid

Method: 8015B - Diesel Range Org	anics (DRO)	(GC) (Conti	nued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO (C23-C40)	4.3	J	5.0	2.5	mg/Kg		10/11/18 06:50	10/11/18 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	66		40 - 140				10/11/18 06:50	10/11/18 18:54	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Aroclor 1221	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Aroclor 1232	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Aroclor 1242	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Aroclor 1248	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Aroclor 1254	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Aroclor 1260	ND		50	17	ug/Kg		10/11/18 07:11	10/12/18 14:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	48		45 - 120				10/11/18 07:11	10/12/18 14:55	1

Client Sample ID: AOC4-SV16-5D Lab Sample ID: 440-221644-5

Date Collected: 10/06/18 10:30

Date Received: 10/06/18 14:05

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND -	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Bromobenzene	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Bromochloromethane	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Bromodichloromethane	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Bromoform	ND	4.6	1.8	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
2-Butanone (MEK)	ND	9.2	4.6	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Carbon tetrachloride	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Chlorobenzene	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Chloroethane	ND	4.6	1.8	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Chloroform	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Chloromethane	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
2-Chlorotoluene	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
4-Chlorotoluene	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
cis-1,2-Dichloroethene	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
cis-1,3-Dichloropropene	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Dibromochloromethane	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,2-Dibromo-3-Chloropropane	ND	4.6	1.8	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,2-Dibromoethane (EDB)	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Dibromomethane	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,2-Dichlorobenzene	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,3-Dichlorobenzene	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,4-Dichlorobenzene	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
Dichlorodifluoromethane	ND	4.6	1.8	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,1-Dichloroethane	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,2-Dichloroethane	ND	1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1
1,1-Dichloroethene	ND	4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	1

TestAmerica Irvine

Matrix: Solid

10/15/2018

Client: Parsons Corporation

Date Collected: 10/06/18 10:30

Date Received: 10/06/18 14:05

Surrogate

Analyte

DRO (C13-C22)

4-Bromofluorobenzene (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV16-5D

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-5

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2-Dichloropropane	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,3-Dichloropropane	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
2,2-Dichloropropane	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,1-Dichloropropene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Ethylbenzene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Hexachlorobutadiene	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Isopropylbenzene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Methylene Chloride	ND		18	4.6	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Methyl-t-Butyl Ether (MTBE)	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
m,p-Xylene	ND		3.7	1.8	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Naphthalene	ND		4.6	1.8	ug/Kg		10/06/18 20:00	10/09/18 13:34	
n-Butylbenzene	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
N-Propylbenzene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
o-Xylene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
p-Isopropyltoluene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
sec-Butylbenzene	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Styrene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
tert-Butylbenzene	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,1,1,2-Tetrachloroethane	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,1,2,2-Tetrachloroethane	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Tetrachloroethene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Toluene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
trans-1,2-Dichloroethene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
trans-1,3-Dichloropropene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,2,3-Trichlorobenzene	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,2,4-Trichlorobenzene	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,1,1-Trichloroethane	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,1,2-Trichloroethane	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Trichloroethene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Trichlorofluoromethane	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,2,3-Trichloropropane	ND		9.2	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,2,4-Trimethylbenzene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
1,3,5-Trimethylbenzene	ND		1.8	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Vinyl chloride	ND		4.6	0.92	ug/Kg		10/06/18 20:00	10/09/18 13:34	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		79 - 120				10/06/18 20:00	10/09/18 13:34	
Dibromofluoromethane (Surr)	102		60 - 120				10/06/18 20:00	10/09/18 13:34	
Toluene-d8 (Surr)	93		79 - 123				10/06/18 20:00	10/09/18 13:34	
Method: 8015B - Gasoline Ra	nge Organics - (G	C)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
GRO (C4-C12)	ND		400	150	ug/Kg			10/13/18 22:22	

TestAmerica Irvine

Analyzed

10/13/18 22:22

Analyzed

10/11/18 19:35

Prepared

Prepared

10/11/18 06:50

Limits

65 - 140

RL

5.0

MDL Unit

2.5 mg/Kg

%Recovery

68

ND

Result Qualifier

Qualifier

Dil Fac

Dil Fac

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-221644-5

TestAmerica Job ID: 440-221644-1

Matrix: Solid

Client Sample ID: AOC4-SV16-5D

Date Collected: 10/06/18 10:30 Date Received: 10/06/18 14:05

Method: 8015B - Diesel Range Or	ganics (DRO)	(GC) (Conti	nued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO (C23-C40)	6.5		5.0	2.5	mg/Kg		10/11/18 06:50	10/11/18 19:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	90		40 - 140				10/11/18 06:50	10/11/18 19:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Aroclor 1221	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Aroclor 1232	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Aroclor 1242	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Aroclor 1248	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Aroclor 1254	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Aroclor 1260	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	55		45 - 120				10/11/18 07:11	10/11/18 20:57	1

Lab Sample ID: 440-221644-6 Client Sample ID: AOC4-SV16-15

Date Collected: 10/06/18 10:45

Date Received: 10/06/18 14:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Bromobenzene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Bromochloromethane	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Bromodichloromethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Bromoform	ND		4.1	1.7	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
2-Butanone (MEK)	ND		8.3	4.1	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Carbon tetrachloride	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Chlorobenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Chloroethane	ND		4.1	1.7	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Chloroform	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Chloromethane	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
2-Chlorotoluene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
4-Chlorotoluene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
cis-1,2-Dichloroethene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
cis-1,3-Dichloropropene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Dibromochloromethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,2-Dibromo-3-Chloropropane	ND		4.1	1.7	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,2-Dibromoethane (EDB)	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Dibromomethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,2-Dichlorobenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,3-Dichlorobenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,4-Dichlorobenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
Dichlorodifluoromethane	ND		4.1	1.7	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,1-Dichloroethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,2-Dichloroethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1
1,1-Dichloroethene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	1

TestAmerica Irvine

Matrix: Solid

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Client Sample ID: AOC4-SV16-15

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte

DRO (C13-C22)

Lab Sample ID: 440-221644-6 Date Collected: 10/06/18 10:45

Matrix: Solid

Method: 8260B - Volatile Orga	nic Compounds (GC/MS) (Cd	ontinued)						
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,2-Dichloropropane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,3-Dichloropropane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
2,2-Dichloropropane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,1-Dichloropropene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Ethylbenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Hexachlorobutadiene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Isopropylbenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Methylene Chloride	ND		17	4.1	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Methyl-t-Butyl Ether (MTBE)	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
m,p-Xylene	ND		3.3	1.7	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Naphthalene	ND		4.1	1.7	ug/Kg		10/06/18 20:00	10/09/18 14:01	
n-Butylbenzene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
N-Propylbenzene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
o-Xylene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
p-Isopropyltoluene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
sec-Butylbenzene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Styrene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
tert-Butylbenzene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,1,1,2-Tetrachloroethane	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,1,2,2-Tetrachloroethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Tetrachloroethene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Toluene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
trans-1,2-Dichloroethene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
trans-1,3-Dichloropropene	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,2,3-Trichlorobenzene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,2,4-Trichlorobenzene	ND		4.1	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,1,1-Trichloroethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,1,2-Trichloroethane	ND		1.7	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
Trichloroethene	ND		1.7		ug/Kg		10/06/18 20:00	10/09/18 14:01	
Trichlorofluoromethane	ND		4.1	0.83			10/06/18 20:00	10/09/18 14:01	
1,2,3-Trichloropropane	ND		8.3	0.83	ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,2,4-Trimethylbenzene	ND		1.7		ug/Kg		10/06/18 20:00	10/09/18 14:01	
1,3,5-Trimethylbenzene	ND		1.7		ug/Kg		10/06/18 20:00	10/09/18 14:01	
Vinyl chloride	ND		4.1		ug/Kg		10/06/18 20:00	10/09/18 14:01	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		79 - 120				10/06/18 20:00	10/09/18 14:01	
Dibromofluoromethane (Surr)	101		60 - 120				10/06/18 20:00	10/09/18 14:01	
Toluene-d8 (Surr)	97		79 - 123				10/06/18 20:00	10/09/18 14:01	
: Method: 8015B - Gasoline Rar	nge Organice - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
GRO (C4-C12)	ND	-,	400		ug/Kg			10/14/18 14:36	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		65 ₋ 140					10/14/18 14:36	

TestAmerica Irvine

Analyzed

10/11/18 19:55

Prepared

10/11/18 06:50

RL

5.0

MDL Unit

2.5 mg/Kg

Result Qualifier

ND

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-221644-6

TestAmerica Job ID: 440-221644-1

Matrix: Solid

Client Sample ID: AOC4-SV16-15

Date Collected: 10/06/18 10:45 Date Received: 10/06/18 14:05

Method: 8015B - Diesel Ra	ange Organics (DRO)	(GC) (Cont	tinued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO (C23-C40)	3.2	J	5.0	2.5	mg/Kg		10/11/18 06:50	10/11/18 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	89		40 - 140				10/11/18 06:50	10/11/18 19:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Aroclor 1221	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Aroclor 1232	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Aroclor 1242	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Aroclor 1248	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Aroclor 1254	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Aroclor 1260	ND		49	17	ug/Kg		10/11/18 07:11	10/11/18 21:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	56		45 _ 120				10/11/18 07:11	10/11/18 21:10	1

Client Sample ID: EB-20181006 Lab Sample ID: 440-221644-7

Date Collected: 10/06/18 11:00 Matrix: Water

Date Received: 10/06/18 14:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Bromobenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Bromoform	ND		1.0	0.40	ug/L			10/13/18 17:45	1
Bromomethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/13/18 17:45	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Chloroethane	ND		1.0	0.40	ug/L			10/13/18 17:45	1
Chloroform	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Chloromethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/13/18 17:45	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Dibromomethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/13/18 17:45	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1

TestAmerica Irvine

_

4

6

9

11

12

14

Client: Parsons Corporation

Date Received: 10/06/18 14:05

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: EB-20181006 Date Collected: 10/06/18 11:00

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-7

Matrix: Water

Method: 8260B - Volatile Organic	Compounds (GC/MS) (Continue	ed)
Analyte	Result Qualifier	R

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/13/18 17:45	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/13/18 17:45	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/13/18 17:45	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/13/18 17:45	1
Naphthalene	ND		1.0	0.40	ug/L			10/13/18 17:45	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/13/18 17:45	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
o-Xylene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Styrene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Toluene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/13/18 17:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/13/18 17:45	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Trichloroethene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/13/18 17:45	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/13/18 17:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120			_		10/13/18 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120		10/13/18 17:45	1
Dibromofluoromethane (Surr)	101		76 - 132		10/13/18 17:45	1
Toluene-d8 (Surr)	99		80 - 128		10/13/18 17:45	1

Method: 8015B -	Gasoline Range	Organics - (G	C)
-----------------	----------------	---------------	----

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50	25	ug/L			10/14/18 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		65 - 140					10/14/18 14:49	1

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Lab Sample ID: 440-221644-7

Matrix: Water

Client Sample ID: EB-20181006
Date Collected: 10/06/18 11:00

Date Received: 10/06/18 14:05

	Range Organics (DRO)		DI.	MDI	I Imia	_	Duamanad	A malumad	Dil Faa
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND		0.52	0.26	mg/L		10/10/18 10:33	10/11/18 21:05	1
ORO (C23-C40)	ND		0.52	0.26	mg/L		10/10/18 10:33	10/11/18 21:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	84		45 - 120				10/10/18 10:33	10/11/18 21:05	1

n-Octacosane -	84	45 - 120				10/10/18 10:33	10/11/18 21:05	1
Method: 8082 - Polychlorinated	Biphenyls (PCBs) by	Gas Chromatograph	у					
Analyte	Result Qualit	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Aroclor 1221	ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Aroclor 1232	ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Aroclor 1242	ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Aroclor 1248	ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Aroclor 1254	ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Aroclor 1260	ND	1.0	0.50	ug/L		10/09/18 06:24	10/10/18 13:19	1
Surrogate	%Recovery Quality	fier Limits				Prepared	Analyzed	Dil Fa
DCB Decachlorobiphenyl (Surr)	93	26 - 115				10/09/18 06:24	10/10/18 13:19	1

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA TestAmerica Job ID: 440-221644-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid Prep Type: Total/NA

				Percent Surr
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(79-120)	(60-120)	(79-123)
440-221605-B-9 MS	Matrix Spike	96	104	95
440-221605-B-9 MSD	Matrix Spike Duplicate	101	102	93
440-221644-1	AOC4-SV17-5	112	98	100
440-221644-2	AOC4-SV17-15	86	102	93
440-221644-4	AOC4-SV16-5	92	104	93
440-221644-5	AOC4-SV16-5D	97	102	93
440-221644-6	AOC4-SV16-15	88	101	97
LCS 440-503694/6	Lab Control Sample	96	99	90
MB 440-503694/5	Method Blank	93	98	94

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

				Percent Surro	gate Recovery (Acceptance Limit
		BFB	DBFM	TOL	
Lab Sample ID	Client Sample ID	(80-120)	(76-132)	(80-128)	
440-221644-3	TB-20181006	97	104	100	
440-221644-7	EB-20181006	94	101	99	
440-221818-A-18 MS	Matrix Spike	94	97	100	
440-221818-A-18 MSD	Matrix Spike Duplicate	95	97	100	
LCS 440-504839/5	Lab Control Sample	96	96	101	
MB 440-504839/4	Method Blank	97	98	104	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB1	
Lab Sample ID	Client Sample ID	(65-140)	
440-221644-1	AOC4-SV17-5	91	
440-221644-1 MS	AOC4-SV17-5	95	
440-221644-1 MSD	AOC4-SV17-5	113	
440-221644-2	AOC4-SV17-15	100	
440-221644-4	AOC4-SV16-5	94	
440-221644-5	AOC4-SV16-5D	68	
440-221644-6	AOC4-SV16-15	97	
440-221711-A-1 MS	Matrix Spike	97	
440-221711-A-1 MSD	Matrix Spike Duplicate	100	
LCS 440-504895/3	Lab Control Sample	116	
LCS 440-505023/3	Lab Control Sample	111	

TestAmerica Irvine

Page 20 of 51

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB1	
_ab Sample ID	Client Sample ID	(65-140)	
CSD 440-504895/52	Lab Control Sample Dup	125	
CSD 440-505023/4	Lab Control Sample Dup	121	
MB 440-504895/53	Method Blank	108	
MB 440-505023/5	Method Blank	98	
Surrogate Legend			

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB1	
Lab Sample ID	Client Sample ID	(65-140)	
440-221398-B-3 MS	Matrix Spike	108	
440-221398-B-3 MSD	Matrix Spike Duplicate	107	
440-221644-7	EB-20181006	98	
LCS 440-505024/3	Lab Control Sample	104	
MB 440-505024/4	Method Blank	100	
Surrogate Legend			

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTCN1	
Lab Sample ID	Client Sample ID	(40-140)	
440-221644-1	AOC4-SV17-5	90	
440-221644-2	AOC4-SV17-15	64	
440-221644-4	AOC4-SV16-5	66	
440-221644-5	AOC4-SV16-5D	90	
440-221644-6	AOC4-SV16-15	89	
440-221792-G-2-D MS	Matrix Spike	90	
440-221792-G-2-E MSD	Matrix Spike Duplicate	88	
LCS 440-504282/2-A	Lab Control Sample	87	
MB 440-504282/1-A	Method Blank	98	
Surrogate Legend			

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water Prep Type: Total/NA

		OTCN1
Lab Sample ID	Client Sample ID	(45-120)
440-221644-7	EB-20181006	84
LCS 440-504060/2-A	Lab Control Sample	90

Page 21 of 51

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTCN1	
Lab Sample ID	Client Sample ID	(45-120)	
LCSD 440-504060/3-A	Lab Control Sample Dup	79	
MB 440-504060/1-A	Method Blank	74	
Surrogate Legend			
OTCN = n-Octacosane			

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		DCB2	
Lab Sample ID	Client Sample ID	(45-120)	
440-221644-1	AOC4-SV17-5	41 X	
440-221644-2	AOC4-SV17-15	52	
440-221644-4	AOC4-SV16-5	48	
440-221644-5	AOC4-SV16-5D	55	
440-221644-6	AOC4-SV16-15	56	
440-221812-A-66-B MS	Matrix Spike	88	
440-221812-A-66-E MSD	Matrix Spike Duplicate	89	
LCS 440-504287/2-A	Lab Control Sample	95	
MB 440-504287/1-A	Method Blank	105	

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		DCB2	
Lab Sample ID	Client Sample ID	(26-115)	
440-221644-7	EB-20181006	93	
LCS 440-503698/4-A	Lab Control Sample	77	
LCSD 440-503698/5-A	Lab Control Sample Dup	77	
MB 440-503698/1-A	Method Blank	93	

DCB = DCB Decachlorobiphenyl (Surr)

TestAmerica Irvine

2

3

5

8

10

12

Method Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Gasoline Range Organics - (GC)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL IRV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL IRV
3546	Microwave Extraction	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL IRV
5035	Closed System Purge and Trap	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

4

O

8

9

12

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Client Sample ID: AOC4-SV17-5 Lab Sample ID: 440-221644-1

Date Collected: 10/06/18 08:47

Date Received: 10/06/18 14:05

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.32 g	10 mL	503776	10/06/18 20:00	AYL	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	503694	10/09/18 11:46	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.01 g	10 mL	505023	10/14/18 12:15	YCL	TAL IRV
Total/NA	Prep	3546			15.00 g	1 mL	504282	10/11/18 06:50	L1A	TAL IRV
Total/NA	Analysis	8015B		1			504384	10/11/18 16:30	LMB	TAL IRV
Total/NA	Prep	3546			15.01 g	2 mL	504287	10/11/18 07:11	L1A	TAL IRV
Total/NA	Analysis	8082		1			504378	10/12/18 14:42	JM	TAL IRV

Client Sample ID: AOC4-SV17-15

Lab Sample ID: 440-221644-2

Date Collected: 10/06/18 09:06

Date Received: 10/06/18 14:05

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.66 g	10 mL	503776	10/06/18 20:00	AYL	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	503694	10/09/18 12:13	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.02 g	10 mL	505023	10/14/18 13:40	YCL	TAL IRV
Total/NA	Prep	3546			15.00 g	1 mL	504282	10/11/18 06:50	L1A	TAL IRV
Total/NA	Analysis	8015B		1			504384	10/11/18 20:37	LMB	TAL IRV
Total/NA	Prep	3546			15.19 g	2 mL	504287	10/11/18 07:11	L1A	TAL IRV
Total/NA	Analysis	8082		1			504378	10/11/18 20:30	JM	TAL IRV

Client Sample ID: TB-20181006 Lab Sample ID: 440-221644-3

Date Collected: 10/06/18 10:15 Date Received: 10/06/18 14:05

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B			10 mL	10 ml	504839	10/13/18 17:16	RM	TAL IRV

Client Sample ID: AOC4-SV16-5 Lab Sample ID: 440-221644-4

Date Collected: 10/06/18 10:24 Matrix: Solid
Date Received: 10/06/18 14:05

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.35 g	10 mL	503776	10/06/18 20:00	AYL	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	503694	10/09/18 12:40	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.04 g	10 mL	505023	10/14/18 14:08	YCL	TAL IRV
Total/NA	Prep	3546			15.02 g	1 mL	504282	10/11/18 06:50	L1A	TAL IRV
Total/NA	Analysis	8015B		1			504384	10/11/18 18:54	LMB	TAL IRV
Total/NA	Prep	3546			15.05 g	2 mL	504287	10/11/18 07:11	L1A	TAL IRV
Total/NA	Analysis	8082		1			504378	10/12/18 14:55	JM	TAL IRV

TestAmerica Irvine

Matrix: Water

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-221644-5

Matrix: Solid

Matrix: Solid

Matrix: Water

Client Sample ID: AOC4-SV16-5D

Date Collected: 10/06/18 10:30 Date Received: 10/06/18 14:05

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.41 g	10 mL	503776	10/06/18 20:00	AYL	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	503694	10/09/18 13:34	AYL	TAL IRV
Total/NA	Analysis	8015B		1	4.98 g	10 mL	504895	10/13/18 22:22	IM	TAL IRV
Total/NA	Prep	3546			15.03 g	1 mL	504282	10/11/18 06:50	L1A	TAL IRV
Total/NA	Analysis	8015B		1			504384	10/11/18 19:35	LMB	TAL IRV
Total/NA	Prep	3546			15.06 g	2 mL	504287	10/11/18 07:11	L1A	TAL IRV
Total/NA	Analysis	8082		1			504378	10/11/18 20:57	JM	TAL IRV

Client Sample ID: AOC4-SV16-15 Lab Sample ID: 440-221644-6

Date Collected: 10/06/18 10:45

Date Received: 10/06/18 14:05

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.04 g	10 mL	503776	10/06/18 20:00	AYL	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	503694	10/09/18 14:01	AYL	TAL IRV
Total/NA	Analysis	8015B		1	5.02 g	10 mL	505023	10/14/18 14:36	YCL	TAL IRV
Total/NA	Prep	3546			15.00 g	1 mL	504282	10/11/18 06:50	L1A	TAL IRV
Total/NA	Analysis	8015B		1			504384	10/11/18 19:55	LMB	TAL IRV
Total/NA	Prep	3546			15.41 g	2 mL	504287	10/11/18 07:11	L1A	TAL IRV
Total/NA	Analysis	8082		1			504378	10/11/18 21:10	JM	TAL IRV

Client Sample ID: EB-20181006 Lab Sample ID: 440-221644-7

Date Collected: 10/06/18 11:00

Date Received: 10/06/18 14:05

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	504839	10/13/18 17:45	RM	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	505024	10/14/18 14:49	YCL	TAL IRV
Total/NA	Prep	3510C			240 mL	1 mL	504060	10/10/18 10:33	HCK	TAL IRV
Total/NA	Analysis	8015B		1			504496	10/11/18 21:05	LMB	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	503698	10/09/18 06:24	L1H	TAL IRV
Total/NA	Analysis	8082		1			504021	10/10/18 13:19	JM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-503694/5

Matrix: Solid

Client Sample ID: Method Blank **Prep Type: Total/NA**

t	Dil Fac	
0:04	1	
:04	1	
:04	1	
.04	1	

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	
Bromobenzene	ND		5.0	1.0	ug/Kg			10/09/18 09:04	
Bromochloromethane	ND		5.0	1.0	ug/Kg			10/09/18 09:04	
Bromodichloromethane	ND		2.0	1.0	ug/Kg			10/09/18 09:04	
Bromoform	ND		5.0	2.0	ug/Kg			10/09/18 09:04	
2-Butanone (MEK)	ND		10	5.0	ug/Kg			10/09/18 09:04	
Carbon tetrachloride	ND		5.0	1.0	ug/Kg			10/09/18 09:04	
Chlorobenzene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	
Chloroethane	ND		5.0	2.0	ug/Kg			10/09/18 09:04	
Chloroform	ND		2.0	1.0	ug/Kg			10/09/18 09:04	
Chloromethane	ND		5.0		ug/Kg			10/09/18 09:04	
2-Chlorotoluene	ND		5.0		ug/Kg			10/09/18 09:04	
4-Chlorotoluene	ND		5.0		ug/Kg			10/09/18 09:04	
cis-1,2-Dichloroethene	ND		2.0		ug/Kg			10/09/18 09:04	
cis-1,3-Dichloropropene	ND		2.0		ug/Kg			10/09/18 09:04	
Dibromochloromethane	ND		2.0		ug/Kg			10/09/18 09:04	
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			10/09/18 09:04	
1,2-Dibromoethane (EDB)	ND		2.0		ug/Kg			10/09/18 09:04	
Dibromomethane	ND		2.0		ug/Kg			10/09/18 09:04	
1,2-Dichlorobenzene	ND		2.0		ug/Kg			10/09/18 09:04	
1,3-Dichlorobenzene	ND		2.0		ug/Kg			10/09/18 09:04	
1,4-Dichlorobenzene	ND		2.0		ug/Kg			10/09/18 09:04	
Dichlorodifluoromethane	ND		5.0		ug/Kg			10/09/18 09:04	
1,1-Dichloroethane	ND		2.0		ug/Kg			10/09/18 09:04	
1,2-Dichloroethane	ND		2.0		ug/Kg			10/09/18 09:04	
1,1-Dichloroethene	ND		5.0		ug/Kg			10/09/18 09:04	
1,2-Dichloropropane	ND		2.0		ug/Kg			10/09/18 09:04	
1,3-Dichloropropane	ND		2.0		ug/Kg			10/09/18 09:04	
2,2-Dichloropropane	ND		2.0		ug/Kg ug/Kg			10/09/18 09:04	
1,1-Dichloropropene	ND		2.0		ug/Kg ug/Kg			10/09/18 09:04	
Ethylbenzene	ND		2.0		ug/Kg ug/Kg			10/09/18 09:04	
Hexachlorobutadiene	ND		5.0					10/09/18 09:04	
			2.0		ug/Kg				
sopropylbenzene Methylene Chloride	ND ND		2.0		ug/Kg ug/Kg			10/09/18 09:04 10/09/18 09:04	
•			5.0						
Methyl-t-Butyl Ether (MTBE)	ND				ug/Kg			10/09/18 09:04	
m,p-Xylene	ND		4.0		ug/Kg			10/09/18 09:04	
Naphthalene	ND		5.0		ug/Kg			10/09/18 09:04	
n-Butylbenzene	ND		5.0		ug/Kg			10/09/18 09:04	
N-Propylbenzene	ND		2.0		ug/Kg			10/09/18 09:04	
o-Xylene	ND		2.0		ug/Kg			10/09/18 09:04	
o-Isopropyltoluene	ND		2.0		ug/Kg			10/09/18 09:04	
sec-Butylbenzene	ND		5.0		ug/Kg			10/09/18 09:04	
Styrene	ND		2.0		ug/Kg			10/09/18 09:04	
tert-Butylbenzene	ND		5.0		ug/Kg			10/09/18 09:04	
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			10/09/18 09:04	
1,1,2,2-Tetrachloroethane	ND		2.0		ug/Kg			10/09/18 09:04	
Tetrachloroethene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	
Toluene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	

TestAmerica Irvine

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-503694/5

Matrix: Solid

Analysis Batch: 503694

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
trans-1,3-Dichloropropene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
1,2,3-Trichlorobenzene	ND		5.0	1.0	ug/Kg			10/09/18 09:04	1
1,2,4-Trichlorobenzene	ND		5.0	1.0	ug/Kg			10/09/18 09:04	1
1,1,1-Trichloroethane	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
1,1,2-Trichloroethane	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
Trichloroethene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
Trichlorofluoromethane	ND		5.0	1.0	ug/Kg			10/09/18 09:04	1
1,2,3-Trichloropropane	ND		10	1.0	ug/Kg			10/09/18 09:04	1
1,2,4-Trimethylbenzene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
1,3,5-Trimethylbenzene	ND		2.0	1.0	ug/Kg			10/09/18 09:04	1
Vinyl chloride	ND		5.0	1.0	ug/Kg			10/09/18 09:04	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 79 - 120 4-Bromofluorobenzene (Surr) 93 10/09/18 09:04 Dibromofluoromethane (Surr) 98 60 - 120 10/09/18 09:04 Toluene-d8 (Surr) 94 79 - 123 10/09/18 09:04

Lab Sample ID: LCS 440-503694/6

Matrix: Solid

Analysis Batch: 503694

Client Sample ID: Lab Control Sample Prep Type: Total/NA

	Spike	LCS	LCS		%Rec.
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits
Benzene	50.0	50.3	ug/Kg		65 - 120
Bromobenzene	50.0	52.9	ug/Kg	106	75 _ 120
Bromochloromethane	50.0	54.0	ug/Kg	108	70 - 135
Bromodichloromethane	50.0	51.6	ug/Kg	103	70 ₋ 135
Bromoform	50.0	49.7	ug/Kg	99	55 - 135
Bromomethane	50.0	44.3	ug/Kg	89	60 - 145
2-Butanone (MEK)	50.0	47.6	ug/Kg	95	40 - 145
Carbon tetrachloride	50.0	50.4	ug/Kg	101	65 - 140
Chlorobenzene	50.0	51.0	ug/Kg	102	75 - 120
Chloroethane	50.0	40.7	ug/Kg	81	60 - 140
Chloroform	50.0	47.4	ug/Kg	95	70 - 130
Chloromethane	50.0	39.7	ug/Kg	79	45 - 145
2-Chlorotoluene	50.0	51.8	ug/Kg	104	70 - 125
4-Chlorotoluene	50.0	52.1	ug/Kg	104	75 - 125
cis-1,2-Dichloroethene	50.0	49.3	ug/Kg	99	70 - 125
cis-1,3-Dichloropropene	50.0	55.2	ug/Kg	110	75 - 125
Dibromochloromethane	50.0	54.2	ug/Kg	108	65 - 140
1,2-Dibromo-3-Chloropropane	50.0	52.0	ug/Kg	104	50 - 135
1,2-Dibromoethane (EDB)	50.0	50.9	ug/Kg	102	70 - 130
Dibromomethane	50.0	52.1	ug/Kg	104	70 - 130
1,2-Dichlorobenzene	50.0	55.7	ug/Kg	111	75 - 120
1,3-Dichlorobenzene	50.0	52.3	ug/Kg	105	75 - 125
1,4-Dichlorobenzene	50.0	55.2	ug/Kg	110	75 - 120
Dichlorodifluoromethane	50.0	29.3	ug/Kg	59	35 - 160
1,1-Dichloroethane	50.0	49.6	ug/Kg	99	70 - 130

TestAmerica Irvine

Page 27 of 51

10/15/2018

Spike

LCS LCS

TestAmerica Job ID: 440-221644-1

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-503694/6

Matrix: Solid

Analysis Batch: 503694

Client Sample ID: Lab Control Sample Prep Type: Total/NA

%Rec.

	Spike	LUS	LUG			MRec.	
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	
1,2-Dichloroethane	50.0	52.2	ug/Kg		104	60 - 140	
1,1-Dichloroethene	50.0	43.7	ug/Kg		87	70 _ 125	
1,2-Dichloropropane	50.0	52.3	ug/Kg		105	70 _ 130	
1,3-Dichloropropane	50.0	53.4	ug/Kg		107	70 - 125	
2,2-Dichloropropane	50.0	49.1	ug/Kg		98	60 _ 145	
1,1-Dichloropropene	50.0	49.9	ug/Kg		100	70 - 130	
Ethylbenzene	50.0	46.5	ug/Kg		93	70 _ 125	
Hexachlorobutadiene	50.0	52.7	ug/Kg		105	60 _ 135	
Isopropylbenzene	50.0	46.7	ug/Kg		93	75 - 130	
Methylene Chloride	50.0	49.0	ug/Kg		98	55 ₋ 135	
Methyl-t-Butyl Ether (MTBE)	50.0	48.6	ug/Kg		97	60 - 140	
m,p-Xylene	50.0	47.7	ug/Kg		95	70 ₋ 125	
Naphthalene	50.0	54.3	ug/Kg		109	55 ₋ 135	
n-Butylbenzene	50.0	48.1	ug/Kg		96	70 - 130	
N-Propylbenzene	50.0	48.4	ug/Kg		97	70 - 130	
o-Xylene	50.0	47.6	ug/Kg		95	70 - 125	
p-Isopropyltoluene	50.0	50.8	ug/Kg		102	75 - 125	
sec-Butylbenzene	50.0	49.3	ug/Kg		99	70 - 125	
Styrene	50.0	48.3	ug/Kg		97	75 - 130	
tert-Butylbenzene	50.0	49.6	ug/Kg		99	70 ₋ 125	
1,1,1,2-Tetrachloroethane	50.0	47.7	ug/Kg		95	70 - 130	
1,1,2,2-Tetrachloroethane	50.0	57.2	ug/Kg		114	55 ₋ 140	
Tetrachloroethene	50.0	45.0	ug/Kg		90	70 _ 125	
Toluene	50.0	47.7	ug/Kg		95	70 ₋ 125	
trans-1,2-Dichloroethene	50.0	44.9	ug/Kg		90	70 _ 125	
trans-1,3-Dichloropropene	50.0	50.8	ug/Kg		102	70 - 135	
1,2,3-Trichlorobenzene	50.0	57.0	ug/Kg		114	60 _ 130	
1,2,4-Trichlorobenzene	50.0	55.8	ug/Kg		112	70 _ 135	
1,1,1-Trichloroethane	50.0	46.2	ug/Kg		92	65 - 135	
1,1,2-Trichloroethane	50.0	55.7	ug/Kg		111	65 _ 135	
Trichloroethene	50.0	53.9	ug/Kg		108	70 - 125	
Trichlorofluoromethane	50.0	40.1	ug/Kg		80	60 _ 145	
1,2,3-Trichloropropane	50.0	55.0	ug/Kg		110	60 _ 135	
1,2,4-Trimethylbenzene	50.0	49.4	ug/Kg		99	70 ₋ 125	
1,3,5-Trimethylbenzene	50.0	48.4	ug/Kg		97	70 ₋ 125	
Vinyl chloride	50.0	43.1	ug/Kg		86	55 - 135	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		79 - 120
Dibromofluoromethane (Surr)	99		60 - 120
Toluene-d8 (Surr)	90		79 - 123

Lab Sample ID: 440-221605-B-9 MS

Matrix: Solid

Analysis Batch: 503694

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		49.4	55.0		ug/Kg		111	65 - 130	

Page 28 of 51

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-221605-B-9 MS Matrix: Solid

Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid									Prep Type: Tot	tai/it/
Analysis Batch: 503694	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	-	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	
Bromobenzene	ND ND		49.4	58.0		ug/Kg	— <u> </u>	117	65 - 140	
Bromochloromethane	ND		49.4	58.4		ug/Kg		118	65 - 145	
Bromodichloromethane	ND		49.4	58.0		ug/Kg		117	65 - 145	
Bromoform	ND		49.4	59.2		ug/Kg		120	50 - 145	
Bromomethane	ND		49.4	52.5		ug/Kg		106	60 - 155	
2-Butanone (MEK)	ND		49.4	63.6		ug/Kg		129	25 - 170	
Carbon tetrachloride	ND		49.4	53.5		ug/Kg		108	60 - 145	
Chlorobenzene	ND		49.4	57.9		ug/Kg		117	70 - 130	
Chloroethane	ND		49.4	45.7		ug/Kg		93	60 - 150	
Chloroform	ND		49.4	53.5		ug/Kg ug/Kg		108	65 ₋ 135	
Chloromethane	ND I	F2	49.4	49.3		ug/Kg ug/Kg		100	40 - 145	
2-Chlorotoluene	ND	1 2	49.4	55.3				112	60 - 135	
4-Chlorotoluene	ND ND		49.4	56.2		ug/Kg		114	65 ₋ 135	
	ND ND					ug/Kg				
cis-1,2-Dichloroethene			49.4	54.0		ug/Kg		109	65 - 135	
cis-1,3-Dichloropropene	ND		49.4	62.2		ug/Kg		126	70 ₋ 135	
Dibromochloromethane	ND		49.4	68.1		ug/Kg		138	60 - 145	
1,2-Dibromo-3-Chloropropane	ND		49.4	60.9		ug/Kg		123	40 - 150	
1,2-Dibromoethane (EDB)	ND		49.4	62.1		ug/Kg		126	65 - 140	
Dibromomethane	ND		49.4	60.6		ug/Kg		123	65 - 140	
1,2-Dichlorobenzene	ND		49.4	54.9		ug/Kg		111	70 - 130	
1,3-Dichlorobenzene	ND		49.4	54.8		ug/Kg		111	70 - 130	
1,4-Dichlorobenzene	ND		49.4	57.5		ug/Kg		116	70 - 130	
Dichlorodifluoromethane	ND	F2 	49.4	39.1		ug/Kg		79	30 - 160	
1,1-Dichloroethane	ND		49.4	55.5		ug/Kg		112	65 ₋ 135	
1,2-Dichloroethane	ND		49.4	58.7		ug/Kg		119	60 ₋ 150	
1,1-Dichloroethene	ND		49.4	54.3		ug/Kg		110	65 - 135	
1,2-Dichloropropane	ND		49.4	56.6		ug/Kg		115	65 ₋ 130	
1,3-Dichloropropane	ND		49.4	65.1		ug/Kg		132	65 - 140	
2,2-Dichloropropane	ND		49.4	56.2		ug/Kg		114	65 - 150	
1,1-Dichloropropene	ND		49.4	51.7		ug/Kg		105	65 ₋ 135	
Ethylbenzene	ND		49.4	52.8		ug/Kg		107	70 - 135	
Hexachlorobutadiene	ND		49.4	37.9		ug/Kg		77	50 - 145	
Isopropylbenzene	ND		49.4	52.2		ug/Kg		106	70 - 145	
Methylene Chloride	ND		49.4	60.4		ug/Kg		122	55 ₋ 145	
Methyl-t-Butyl Ether (MTBE)	ND		49.4	55.3		ug/Kg		112	55 ₋ 155	
m,p-Xylene	ND		49.4	52.9		ug/Kg		107	70 - 130	
Naphthalene	ND		49.4	55.4		ug/Kg		112	40 - 150	
n-Butylbenzene	ND		49.4	46.6		ug/Kg		94	55 - 145	
N-Propylbenzene	ND		49.4	52.1		ug/Kg		105	65 - 140	
o-Xylene	ND		49.4	55.6		ug/Kg		113	65 - 130	
p-Isopropyltoluene	ND		49.4	52.6		ug/Kg		107	60 - 140	
sec-Butylbenzene	ND		49.4	51.2		ug/Kg		104	60 - 135	
Styrene	ND		49.4	51.6		ug/Kg		104	70 - 140	
tert-Butylbenzene	ND		49.4	53.8		ug/Kg		109	60 - 140	
1,1,1,2-Tetrachloroethane	ND		49.4	56.2		ug/Kg		114	65 ₋ 145	
1,1,2,2-Tetrachloroethane	ND		49.4	66.7		ug/Kg		135	40 - 160	
Tetrachloroethene	ND		49.4	54.0		ug/Kg		109	65 _ 135	
Toluene	ND		49.4	55.8		ug/Kg		113	70 - 130	

TestAmerica Irvine

3

5

7

ŏ

10

12

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-221605-B-9 MS

Matrix: Solid

Analysis Batch: 503694

Client Sample ID: Matrix Spike Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,2-Dichloroethene	ND		49.4	53.2		ug/Kg		108	70 _ 135	
trans-1,3-Dichloropropene	ND		49.4	60.4		ug/Kg		122	60 - 145	
1,2,3-Trichlorobenzene	ND		49.4	48.4		ug/Kg		98	45 - 145	
1,2,4-Trichlorobenzene	ND		49.4	49.6		ug/Kg		100	50 - 140	
1,1,1-Trichloroethane	ND		49.4	52.6		ug/Kg		106	65 _ 145	
1,1,2-Trichloroethane	ND	F1	49.4	71.7	F1	ug/Kg		145	65 - 140	
Trichloroethene	ND		49.4	58.1		ug/Kg		118	65 _ 140	
Trichlorofluoromethane	ND		49.4	47.8		ug/Kg		97	55 ₋ 155	
1,2,3-Trichloropropane	ND		49.4	69.5		ug/Kg		141	50 - 150	
1,2,4-Trimethylbenzene	ND		49.4	54.0		ug/Kg		109	65 _ 140	
1,3,5-Trimethylbenzene	ND		49.4	53.4		ug/Kg		108	65 - 135	
Vinyl chloride	ND		49.4	52.1		ug/Kg		105	55 - 140	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		79 - 120
Dibromofluoromethane (Surr)	104		60 - 120
Toluene-d8 (Surr)	95		79 - 123

Lab Sample ID: 440-221605-B-9 MSD

Matrix: Solid

Analysis Batch: 503694

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		49.4	51.1		ug/Kg		103	65 - 130	7	20
Bromobenzene	ND		49.4	57.4		ug/Kg		116	65 - 140	1	25
Bromochloromethane	ND		49.4	54.7		ug/Kg		111	65 - 145	6	25
Bromodichloromethane	ND		49.4	50.9		ug/Kg		103	65 - 145	13	20
Bromoform	ND		49.4	58.1		ug/Kg		118	50 - 145	2	30
Bromomethane	ND		49.4	42.7		ug/Kg		86	60 - 155	20	25
2-Butanone (MEK)	ND		49.4	54.0		ug/Kg		109	25 - 170	16	40
Carbon tetrachloride	ND		49.4	49.5		ug/Kg		100	60 - 145	8	25
Chlorobenzene	ND		49.4	52.5		ug/Kg		106	70 - 130	10	25
Chloroethane	ND		49.4	39.7		ug/Kg		80	60 - 150	14	25
Chloroform	ND		49.4	47.9		ug/Kg		97	65 - 135	11	20
Chloromethane	ND	F2	49.4	33.2	F2	ug/Kg		67	40 - 145	39	25
2-Chlorotoluene	ND		49.4	52.4		ug/Kg		106	60 - 135	5	25
4-Chlorotoluene	ND		49.4	50.5		ug/Kg		102	65 - 135	11	25
cis-1,2-Dichloroethene	ND		49.4	50.3		ug/Kg		102	65 - 135	7	25
cis-1,3-Dichloropropene	ND		49.4	57.7		ug/Kg		117	70 - 135	7	25
Dibromochloromethane	ND		49.4	62.4		ug/Kg		126	60 - 145	9	25
1,2-Dibromo-3-Chloropropane	ND		49.4	60.5		ug/Kg		122	40 - 150	1	30
1,2-Dibromoethane (EDB)	ND		49.4	55.8		ug/Kg		113	65 - 140	11	25
Dibromomethane	ND		49.4	55.6		ug/Kg		113	65 - 140	9	25
1,2-Dichlorobenzene	ND		49.4	49.7		ug/Kg		101	70 - 130	10	25
1,3-Dichlorobenzene	ND		49.4	49.0		ug/Kg		99	70 - 130	11	25
1,4-Dichlorobenzene	ND		49.4	52.6		ug/Kg		106	70 - 130	9	25
Dichlorodifluoromethane	ND	F2	49.4	25.2	F2	ug/Kg		51	30 - 160	43	35
1,1-Dichloroethane	ND		49.4	50.8		ug/Kg		103	65 - 135	9	25

TestAmerica Irvine

Page 30 of 51

5

3

4

6

8

10

12

13

14

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-221605-B-9 MSD

Matrix: Solid

Analysis Batch: 503694

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

	•	Sample	Spike		MSD				%Rec.		RPD
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dichloroethane	ND		49.4	52.6		ug/Kg		107	60 - 150	11	25
1,1-Dichloroethene	ND		49.4	48.3		ug/Kg		98	65 - 135	12	25
1,2-Dichloropropane	ND		49.4	53.5		ug/Kg		108	65 - 130	6	20
1,3-Dichloropropane	ND		49.4	59.2		ug/Kg		120	65 - 140	9	25
2,2-Dichloropropane	ND		49.4	51.0		ug/Kg		103	65 - 150	10	25
1,1-Dichloropropene	ND		49.4	49.8		ug/Kg		101	65 - 135	4	20
Ethylbenzene	ND		49.4	47.3		ug/Kg		96	70 - 135	11	25
Hexachlorobutadiene	ND		49.4	31.3		ug/Kg		63	50 - 145	19	35
Isopropylbenzene	ND		49.4	46.5		ug/Kg		94	70 - 145	12	25
Methylene Chloride	ND		49.4	57.3		ug/Kg		116	55 - 145	5	25
Methyl-t-Butyl Ether (MTBE)	ND		49.4	49.9		ug/Kg		101	55 - 155	10	35
m,p-Xylene	ND		49.4	46.5		ug/Kg		94	70 - 130	13	25
Naphthalene	ND		49.4	47.7		ug/Kg		97	40 - 150	15	40
n-Butylbenzene	ND		49.4	40.8		ug/Kg		83	55 - 145	13	30
N-Propylbenzene	ND		49.4	48.4		ug/Kg		98	65 - 140	7	25
o-Xylene	ND		49.4	50.3		ug/Kg		102	65 - 130	10	25
p-Isopropyltoluene	ND		49.4	48.1		ug/Kg		97	60 - 140	9	25
sec-Butylbenzene	ND		49.4	45.5		ug/Kg		92	60 - 135	12	25
Styrene	ND		49.4	47.4		ug/Kg		96	70 - 140	9	25
tert-Butylbenzene	ND		49.4	49.8		ug/Kg		101	60 - 140	8	25
1,1,1,2-Tetrachloroethane	ND		49.4	47.6		ug/Kg		96	65 - 145	17	20
1,1,2,2-Tetrachloroethane	ND		49.4	68.5		ug/Kg		139	40 - 160	3	30
Tetrachloroethene	ND		49.4	51.0		ug/Kg		103	65 - 135	6	25
Toluene	ND		49.4	50.1		ug/Kg		101	70 - 130	11	20
trans-1,2-Dichloroethene	ND		49.4	47.6		ug/Kg		96	70 - 135	11	25
trans-1,3-Dichloropropene	ND		49.4	52.0		ug/Kg		105	60 - 145	15	25
1,2,3-Trichlorobenzene	ND		49.4	41.0		ug/Kg		83	45 - 145	17	30
1,2,4-Trichlorobenzene	ND		49.4	42.7		ug/Kg		86	50 - 140	15	30
1,1,1-Trichloroethane	ND		49.4	46.8		ug/Kg		95	65 - 145	12	20
1,1,2-Trichloroethane	ND	F1	49.4	58.3		ug/Kg		118	65 - 140	21	30
Trichloroethene	ND		49.4	55.7		ug/Kg		113	65 - 140	4	25
Trichlorofluoromethane	ND		49.4	40.6		ug/Kg		82	55 ₋ 155	16	25
1,2,3-Trichloropropane	ND		49.4	65.5		ug/Kg		132	50 - 150	6	30
1,2,4-Trimethylbenzene	ND		49.4	49.8		ug/Kg		101	65 - 140	8	25
1,3,5-Trimethylbenzene	ND		49.4	49.1		ug/Kg		99	65 - 135	8	25
Vinyl chloride	ND		49.4	43.0		ug/Kg		87	55 - 140	19	30

MSD	MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		79 - 120
Dibromofluoromethane (Surr)	102		60 - 120
Toluene-d8 (Surr)	93		79 - 123

Lab Sample ID: MB 440-504839/4

Matrix: Water

Analysis Batch: 504839

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 10/13/18 09:02 Benzene ND 0.50 0.25 ug/L

TestAmerica Irvine

Page 31 of 51

10/15/2018

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-504839/4

Analysis Batch: 504839

Matrix: Water

Client Sample ID: Method Blank

Prep Type: Total/NA

Amelida		MB	DI.			_	Duam	Analyzad	Dil Car
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50		ug/L			10/13/18 09:02	1
Bromochloromethane	ND		0.50		ug/L			10/13/18 09:02	1
Bromodichloromethane	ND		0.50	0.25				10/13/18 09:02	1
Bromoform	ND		1.0		ug/L			10/13/18 09:02	1
Bromomethane	ND		0.50		ug/L			10/13/18 09:02	1
2-Butanone (MEK)	ND		5.0		ug/L			10/13/18 09:02	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/13/18 09:02	1
Chlorobenzene	ND		0.50		ug/L			10/13/18 09:02	1
Chloroethane	ND		1.0	0.40	ug/L			10/13/18 09:02	1
Chloroform	ND		0.50	0.25	ug/L			10/13/18 09:02	1
Chloromethane	ND		0.50	0.25	ug/L			10/13/18 09:02	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/13/18 09:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/13/18 09:02	1
Dibromomethane	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/13/18 09:02	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/13/18 09:02	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,2-Dichloroethane	ND		0.50		ug/L			10/13/18 09:02	1
1,1-Dichloroethene	ND		0.50		ug/L			10/13/18 09:02	1
1,2-Dichloropropane	ND		0.50		ug/L			10/13/18 09:02	1
1,3-Dichloropropane	ND		0.50		ug/L			10/13/18 09:02	1
2,2-Dichloropropane	ND		1.0		ug/L			10/13/18 09:02	1
1,1-Dichloropropene	ND		0.50		ug/L			10/13/18 09:02	
Ethylbenzene	ND		0.50		ug/L			10/13/18 09:02	1
Hexachlorobutadiene	ND		0.50		ug/L			10/13/18 09:02	1
Isopropylbenzene	ND		0.50		ug/L			10/13/18 09:02	
Methylene Chloride	ND		2.0	0.88	_			10/13/18 09:02	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			10/13/18 09:02	1
m,p-Xylene	ND		1.0	0.50				10/13/18 09:02	
Naphthalene	ND		1.0		ug/L			10/13/18 09:02	1
n-Butylbenzene	ND		1.0		ug/L			10/13/18 09:02	1
	ND ND		0.50						
N-Propylbenzene	ND ND		0.50		ug/L ug/L			10/13/18 09:02 10/13/18 09:02	1
o-Xylene					-				1
p-Isopropyltoluene	ND		0.50		ug/L			10/13/18 09:02	
sec-Butylbenzene	ND		0.50		ug/L			10/13/18 09:02	1
Styrene	ND		0.50		ug/L			10/13/18 09:02	1
tert-Butylbenzene	ND		0.50		ug/L			10/13/18 09:02	
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L 			10/13/18 09:02	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/13/18 09:02	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/13/18 09:02	1

TestAmerica Irvine

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-504839/4

Matrix: Water

Analysis Batch: 504839

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/13/18 09:02	•
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/13/18 09:02	•
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/13/18 09:02	•
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/13/18 09:02	
Trichloroethene	ND		0.50	0.25	ug/L			10/13/18 09:02	•
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/13/18 09:02	
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/13/18 09:02	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/13/18 09:02	

MB MB

Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	80 - 120	_		10/13/18 09:02	1
Dibromofluoromethane (Surr)	98	76 - 132			10/13/18 09:02	1
Toluene-d8 (Surr)	104	80 - 128			10/13/18 09:02	1

Lab Sample ID: LCS 440-504839/5

Matrix: Water

Analysis Batch: 504839

Client Sample ID:	Lab	Co	ontrol Sample	
	Prep	T	ype: Total/NA	

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	25.0	25.5		ug/L		102	68 - 130	
Bromobenzene	25.0	23.7		ug/L		95	70 - 130	
Bromochloromethane	25.0	25.8		ug/L		103	70 - 130	
Bromodichloromethane	25.0	23.8		ug/L		95	70 - 132	
Bromoform	25.0	21.1		ug/L		84	60 - 148	
Bromomethane	25.0	21.6		ug/L		86	64 - 139	
2-Butanone (MEK)	25.0	26.1		ug/L		105	44 - 150	
Carbon tetrachloride	25.0	23.5		ug/L		94	60 - 150	
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130	
Chloroethane	25.0	21.8		ug/L		87	64 - 135	
Chloroform	25.0	23.7		ug/L		95	70 - 130	
Chloromethane	25.0	21.2		ug/L		85	47 - 140	
2-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130	
4-Chlorotoluene	25.0	26.6		ug/L		106	70 - 130	
cis-1,2-Dichloroethene	25.0	26.4		ug/L		106	70 - 133	
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	70 - 133	
Dibromochloromethane	25.0	25.4		ug/L		102	69 - 145	
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	52 - 140	
1,2-Dibromoethane (EDB)	25.0	24.4		ug/L		97	70 - 130	
Dibromomethane	25.0	23.7		ug/L		95	70 - 130	
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	
Dichlorodifluoromethane	25.0	17.8		ug/L		71	29 - 150	
1,1-Dichloroethane	25.0	25.5		ug/L		102	64 - 130	

TestAmerica Irvine

Page 33 of 51

TestAmerica Job ID: 440-221644-1

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-504839/5

Matrix: Water

Analysis Batch: 504839

Client Sample ID: Lab Control Sample Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,2-Dichloroethane	25.0	23.5		ug/L		94	57 - 138
1,1-Dichloroethene	25.0	26.4		ug/L		106	70 - 130
1,2-Dichloropropane	25.0	26.5		ug/L		106	67 _ 130
1,3-Dichloropropane	25.0	25.9		ug/L		103	70 - 130
2,2-Dichloropropane	25.0	25.3		ug/L		101	68 - 141
1,1-Dichloropropene	25.0	26.7		ug/L		107	70 - 130
Ethylbenzene	25.0	26.1		ug/L		104	70 _ 130
Hexachlorobutadiene	25.0	19.9		ug/L		79	10 _ 150
Isopropylbenzene	25.0	27.2		ug/L		109	70 - 136
Methylene Chloride	25.0	20.0		ug/L		80	52 ₋ 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.7		ug/L		95	63 _ 131
m,p-Xylene	25.0	26.5		ug/L		106	70 - 130
Naphthalene	25.0	26.2		ug/L		105	60 - 140
n-Butylbenzene	25.0	28.3		ug/L		113	65 - 150
N-Propylbenzene	25.0	28.1		ug/L		112	67 _ 139
o-Xylene	25.0	27.6		ug/L		110	70 - 130
p-Isopropyltoluene	25.0	27.1		ug/L		108	70 ₋ 132
sec-Butylbenzene	25.0	27.6		ug/L		110	70 - 138
Styrene	25.0	23.8		ug/L		95	70 - 134
tert-Butylbenzene	25.0	26.8		ug/L		107	70 _ 130
1,1,1,2-Tetrachloroethane	25.0	23.5		ug/L		94	60 - 141
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	63 _ 130
Tetrachloroethene	25.0	23.0		ug/L		92	70 _ 130
Toluene	25.0	27.1		ug/L		109	70 _ 130
trans-1,2-Dichloroethene	25.0	27.4		ug/L		110	70 _ 130
trans-1,3-Dichloropropene	25.0	26.2		ug/L		105	70 - 132
1,2,3-Trichlorobenzene	25.0	22.3		ug/L		89	60 - 140
1,2,4-Trichlorobenzene	25.0	22.8		ug/L		91	60 - 140
1,1,1-Trichloroethane	25.0	22.6		ug/L		90	70 - 130
1,1,2-Trichloroethane	25.0	25.4		ug/L		101	70 - 130
Trichloroethene	25.0	25.8		ug/L		103	70 - 130
Trichlorofluoromethane	25.0	20.0		ug/L		80	60 _ 150
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	63 _ 130
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	70 ₋ 135
1,3,5-Trimethylbenzene	25.0	26.8		ug/L		107	70 ₋ 136
Vinyl chloride	25.0	24.0		ug/L		96	59 - 133

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	101		80 - 128

Lab Sample ID: 440-221818-A-18 MS

Matrix: Water

Analysis Batch: 504839

7										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		250	264		ug/L		106	66 - 130	

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Page 34 of 51

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-221818-A-18 MS

Matrix: Water

Client Sample ID: Matrix Spike
Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Bromobenzene	ND		250	244		ug/L		98	70 - 130
Bromochloromethane	ND		250	270		ug/L		108	70 - 130
Bromodichloromethane	ND		250	251		ug/L		101	70 - 138
Bromoform	ND		250	219		ug/L		88	59 - 150
Bromomethane	ND		250	217		ug/L		87	62 _ 131
2-Butanone (MEK)	ND		250	236		ug/L		94	48 - 140
Carbon tetrachloride	ND		250	242		ug/L		97	60 - 150
Chlorobenzene	ND		250	262		ug/L		105	70 - 130
Chloroethane	ND		250	222		ug/L		89	68 - 130
Chloroform	ND		250	245		ug/L		98	70 - 130
Chloromethane	ND		250	213		ug/L		85	39 - 144
2-Chlorotoluene	ND		250	270		ug/L		108	70 - 130
4-Chlorotoluene	ND		250	274		ug/L		109	70 - 130
cis-1,2-Dichloroethene	190		250	464		ug/L		111	70 - 130
cis-1,3-Dichloropropene	ND		250	292		ug/L		117	70 _ 133
Dibromochloromethane	ND		250	258		ug/L		103	70 - 148
1,2-Dibromo-3-Chloropropane	ND		250	223		ug/L		89	48 - 140
1,2-Dibromoethane (EDB)	ND		250	248		ug/L		99	70 ₋ 131
Dibromomethane	ND		250	244		ug/L		98	70 - 130
1,2-Dichlorobenzene	ND		250	250		ug/L		100	70 ₋ 130
1,3-Dichlorobenzene	ND		250	256		ug/L		102	70 - 130
1,4-Dichlorobenzene	ND		250	245		ug/L		98	70 - 130
Dichlorodifluoromethane	ND		250	177		ug/L		71	25 - 142
1,1-Dichloroethane	34		250	289		ug/L		102	65 - 130
I,2-Dichloroethane	ND.		250	242		ug/L		97	56 ₋ 146
I,1-Dichloroethene	44		250	305		ug/L		104	70 - 130
1,2-Dichloropropane	ND		250	275		ug/L		110	69 - 130
1,3-Dichloropropane	ND		250	259		ug/L		104	70 ₋ 130
2,2-Dichloropropane	ND		250	254		ug/L		102	69 - 138
1,1-Dichloropropene	ND		250	276		ug/L		110	64 - 130
Ethylbenzene	ND		250	269		ug/L		108	70 - 130
Hexachlorobutadiene	ND		250	205		ug/L		82	10 ₋ 150
sopropylbenzene	ND		250	281		.		112	70 - 132
• • •	ND		250	203		ug/L		81	52 ₋ 130
Methylene Chloride Methyl-t-Butyl Ether (MTBE)	ND		250	242		ug/L		97	70 - 130
m,p-Xylene	ND		250	276		ug/L		110	70 - 133
	ND ND					ug/L			
Naphthalene n-Butylbenzene	ND ND		250 250	261 298		ug/L		105 119	60 ₋ 140 61 ₋ 149
						ug/L			66 - 135
N-Propylbenzene	ND		250	289		ug/L		115	
o-Xylene	ND		250	286		ug/L		114	70 ₋ 133
o-Isopropyltoluene	ND		250	280		ug/L		112	70 - 130
sec-Butylbenzene	ND		250	284		ug/L		114	67 ₋ 134
Styrene	ND		250	251		ug/L		100	29 - 150
ert-Butylbenzene	ND		250	277		ug/L		111	70 - 130
1,1,1,2-Tetrachloroethane	ND		250	245		ug/L 		98	60 - 149
1,1,2,2-Tetrachloroethane	ND		250	246		ug/L		98	63 - 130
Tetrachloroethene	8.8		250	242		ug/L		93	70 - 137

TestAmerica Irvine

Page 35 of 51

2

3

5

11

12

14

15

10/15/2018

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-221818-A-18 MS

Matrix: Water

Analysis Batch: 504839

Client Sample ID: Matrix Spike Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,2-Dichloroethene	3.4	J	250	292		ug/L		115	70 - 130	
trans-1,3-Dichloropropene	ND		250	267		ug/L		107	70 _ 138	
1,2,3-Trichlorobenzene	ND		250	233		ug/L		93	60 _ 140	
1,2,4-Trichlorobenzene	ND		250	238		ug/L		95	60 - 140	
1,1,1-Trichloroethane	ND		250	230		ug/L		92	70 _ 130	
1,1,2-Trichloroethane	2.8	J	250	265		ug/L		105	70 - 130	
Trichloroethene	1000		250	1250	4	ug/L		88	70 _ 130	
Trichlorofluoromethane	ND		250	204		ug/L		82	60 _ 150	
1,2,3-Trichloropropane	ND		250	219		ug/L		88	60 - 130	
1,2,4-Trimethylbenzene	ND		250	255		ug/L		102	70 _ 130	
1,3,5-Trimethylbenzene	ND		250	272		ug/L		109	70 - 130	
Vinyl chloride	18		250	260		ug/L		97	50 _ 137	

Limits

 Surrogate
 %Recovery
 Qualifier

 4-Bromoffuorobenzene (Surr)
 94

 4-Bromofluorobenzene (Surr)
 94
 80 - 120

 Dibromofluoromethane (Surr)
 97
 76 - 132

 Toluene-d8 (Surr)
 100
 80 - 128

Lab Sample ID: 440-221818-A-18 MSD

Matrix: Water

Analysis Batch: 504839

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analysis Batch, 504055	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		250	237		ug/L		95	66 - 130	11	20
Bromobenzene	ND		250	223		ug/L		89	70 - 130	9	20
Bromochloromethane	ND		250	239		ug/L		96	70 - 130	12	25
Bromodichloromethane	ND		250	228		ug/L		91	70 - 138	10	20
Bromoform	ND		250	193		ug/L		77	59 - 150	13	25
Bromomethane	ND		250	198		ug/L		79	62 - 131	9	25
2-Butanone (MEK)	ND		250	200		ug/L		80	48 - 140	16	40
Carbon tetrachloride	ND		250	211		ug/L		84	60 - 150	14	25
Chlorobenzene	ND		250	235		ug/L		94	70 - 130	11	20
Chloroethane	ND		250	202		ug/L		81	68 - 130	10	25
Chloroform	ND		250	222		ug/L		89	70 - 130	10	20
Chloromethane	ND		250	198		ug/L		79	39 - 144	7	25
2-Chlorotoluene	ND		250	246		ug/L		98	70 - 130	9	20
4-Chlorotoluene	ND		250	249		ug/L		99	70 - 130	10	20
cis-1,2-Dichloroethene	190		250	424		ug/L		95	70 - 130	9	20
cis-1,3-Dichloropropene	ND		250	259		ug/L		104	70 - 133	12	20
Dibromochloromethane	ND		250	232		ug/L		93	70 - 148	11	25
1,2-Dibromo-3-Chloropropane	ND		250	206		ug/L		82	48 - 140	8	30
1,2-Dibromoethane (EDB)	ND		250	222		ug/L		89	70 - 131	11	25
Dibromomethane	ND		250	218		ug/L		87	70 - 130	11	25
1,2-Dichlorobenzene	ND		250	229		ug/L		92	70 - 130	9	20
1,3-Dichlorobenzene	ND		250	232		ug/L		93	70 - 130	10	20
1,4-Dichlorobenzene	ND		250	222		ug/L		89	70 - 130	10	20
Dichlorodifluoromethane	ND		250	165		ug/L		66	25 - 142	7	30
1,1-Dichloroethane	34		250	261		ug/L		91	65 - 130	10	20

TestAmerica Irvine

Page 36 of 51

2

3

_

6

8

10

13

14

15

10/15/2018

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Lab Sample ID: 440-221818-A-18 MSD

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Analysis Batch: 504839

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dichloroethane	ND		250	218		ug/L		87	56 - 146	10	20
1,1-Dichloroethene	44		250	275		ug/L		92	70 - 130	10	20
1,2-Dichloropropane	ND		250	244		ug/L		98	69 - 130	12	20
1,3-Dichloropropane	ND		250	237		ug/L		95	70 - 130	9	25
2,2-Dichloropropane	ND		250	225		ug/L		90	69 - 138	12	25
1,1-Dichloropropene	ND		250	244		ug/L		98	64 - 130	12	20
Ethylbenzene	ND		250	238		ug/L		95	70 - 130	12	20
Hexachlorobutadiene	ND		250	185		ug/L		74	10 - 150	10	20
Isopropylbenzene	ND		250	247		ug/L		99	70 - 132	13	20
Methylene Chloride	ND		250	183		ug/L		73	52 - 130	11	20
Methyl-t-Butyl Ether (MTBE)	ND		250	218		ug/L		87	70 - 130	10	25
m,p-Xylene	ND		250	240		ug/L		96	70 - 133	14	25
Naphthalene	ND		250	241		ug/L		97	60 - 140	8	30
n-Butylbenzene	ND		250	267		ug/L		107	61 - 149	11	20
N-Propylbenzene	ND		250	261		ug/L		104	66 - 135	10	20
o-Xylene	ND		250	255		ug/L		102	70 - 133	11	20
p-Isopropyltoluene	ND		250	254		ug/L		102	70 - 130	10	20
sec-Butylbenzene	ND		250	255		ug/L		102	67 - 134	11	20
Styrene	ND		250	223		ug/L		89	29 - 150	12	35
tert-Butylbenzene	ND		250	251		ug/L		100	70 - 130	10	20
1,1,1,2-Tetrachloroethane	ND		250	219		ug/L		88	60 - 149	11	20
1,1,2,2-Tetrachloroethane	ND		250	226		ug/L		90	63 - 130	8	30
Tetrachloroethene	8.8		250	217		ug/L		83	70 - 137	11	20
Toluene	ND		250	249		ug/L		100	70 - 130	11	20
trans-1,2-Dichloroethene	3.4	J	250	259		ug/L		102	70 - 130	12	20
trans-1,3-Dichloropropene	ND		250	239		ug/L		96	70 - 138	11	25
1,2,3-Trichlorobenzene	ND		250	217		ug/L		87	60 - 140	7	20
1,2,4-Trichlorobenzene	ND		250	216		ug/L		87	60 - 140	10	20
1,1,1-Trichloroethane	ND		250	204		ug/L		81	70 - 130	12	20
1,1,2-Trichloroethane	2.8	J	250	238		ug/L		94	70 - 130	11	25
Trichloroethene	1000		250	1120	4	ug/L		39	70 - 130	10	20
Trichlorofluoromethane	ND		250	179		ug/L		72	60 - 150	13	25
1,2,3-Trichloropropane	ND		250	203		ug/L		81	60 - 130	7	30
1,2,4-Trimethylbenzene	ND		250	233		ug/L		93	70 - 130	9	25
1,3,5-Trimethylbenzene	ND		250	249		ug/L		100	70 - 130	9	20
Vinyl chloride	18		250	237		ug/L		87	50 - 137	9	30

USD	MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	97		76 - 132
Toluene-d8 (Surr)	100		80 128

TestAmerica Irvine

Page 37 of 51

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

%Rec

63

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Limits

60 - 140

Client Sample ID: Matrix Spike Duplicate

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-504895/53 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 504895

мв мв RL Result Qualifier MDL Unit D Analyzed Dil Fac Analyte Prepared 400 10/13/18 12:30 GRO (C4-C12) ND 150 ug/Kg

MB MB

Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed 65 - 140 10/13/18 12:30 4-Bromofluorobenzene (Surr) 108

Lab Sample ID: LCS 440-504895/3

Matrix: Solid

Analysis Batch: 504895

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit %Rec GRO (C4-C12) 1600 84 70 - 135 1350 ug/Kg

LCS LCS

Surrogate %Recovery Qualifier Limits 65 - 140 4-Bromofluorobenzene (Surr) 116

Lab Sample ID: LCSD 440-504895/52

Matrix: Solid

Analysis Batch: 504895

LCSD LCSD %Rec. RPD Spike Added Result Qualifier Unit %Rec Limits RPD Limit GRO (C4-C12) 1600 1350 70 - 135 20 ug/Kg n

LCSD LCSD

Result

ND

Qualifier

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 125 65 - 140

Lab Sample ID: 440-221711-A-1 MS

Matrix: Solid

GRO (C4-C12)

Analyte

Prep Type: Total/NA Analysis Batch: 504895 MS MS %Rec. Sample Sample Spike

Result

1000

Qualifier

Unit

ug/Kg

Added

1600

MS MS

%Recovery Surrogate Qualifier Limits 4-Bromofluorobenzene (Surr) 97 65 - 140

Lab Sample ID: 440-221711-A-1 MSD

Matrix: Solid

Analysis Batch: 504895

7 manyolo Batom oo looc	Sample	Sample	Spike	MSD	MSD				%Rec.	RPD
Analyte GRO (C4-C12)	Result ND	Qualifier	Added 1580	Result 1010	Qualifier	Unit ug/Kg	D	%Rec 64	Limits 60 - 140	 Limit 30

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 100 65 - 140

TestAmerica Irvine

Prep Type: Total/NA

10

10

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: MB 440-505023/5 Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 505023

						_		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Ana
	MB	МВ						

nalyzed Dil Fac 10/14/18 10:15 GRO (C4-C12) ND 400 150 ug/Kg

MB MB Qualifier Dil Fac Surrogate %Recovery Prepared Analyzed 65 - 140 10/14/18 10:15 4-Bromofluorobenzene (Surr) 98

Lab Sample ID: LCS 440-505023/3 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 505023

LCS LCS Spike %Rec. Added Result Qualifier Analyte Limits Unit %Rec GRO (C4-C12) 1600 1240 ug/Kg 78 70 - 135

LCS LCS Surrogate %Recovery Qualifier Limits 65 - 140 4-Bromofluorobenzene (Surr) 111

Lab Sample ID: LCSD 440-505023/4 Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 505023

LCSD LCSD Spike %Rec. RPD Added Result Qualifier RPD Unit %Rec Limits Limit GRO (C4-C12) 1600 1170 73 70 - 135 6 ug/Kg

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 121 65 - 140

Lab Sample ID: 440-221644-1 MS Client Sample ID: AOC4-SV17-5 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 505023

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
GRO (C4-C12)	ND		1580	1030		ug/Kg		65	60 - 140	
	MS	MS								

%Recovery Surrogate Qualifier Limits 4-Bromofluorobenzene (Surr) 95 65 - 140

Lab Sample ID: 440-221644-1 MSD Client Sample ID: AOC4-SV17-5 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 505023

7 maryolo Datom 000020	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte GRO (C4-C12)	Result	Qualifier	Added 1590	Result 1100	Qualifier	Unit ug/Kg	<u>D</u>	%Rec	Limits 60 - 140	RPD 6	Limit 30
S.13 (8 . 8 . <u>2</u>)						~g/. (g			00 - 1.10	ŭ	

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 65 - 140 113

4-1

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: MB 440-505024/4

Matrix: Water

Analysis Batch: 505024

MB MB

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 GRO (C4-C12)
 ND
 50
 25
 ug/L
 10/14/18 09:41
 1

MB MB

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 4-Bromofluorobenzene (Surr)
 100
 65 - 140
 10/14/18 09:41
 1

Lab Sample ID: LCS 440-505024/3

Matrix: Water

Analysis Batch: 505024

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit %Rec GRO (C4-C12) 800 88 80 - 120 705 ug/L

LCS LCS

Surrogate%RecoveryQualifierLimits4-Bromofluorobenzene (Surr)10465 - 140

Lab Sample ID: 440-221398-B-3 MS

Matrix: Water

Analysis Batch: 505024

%Rec. Sample Sample Spike MS MS Qualifier Added Analyte Result Result Qualifier Unit %Rec Limits GRO (C4-C12) 800 734 65 - 140 64 ug/L

MS MS

Surrogate %Recovery Qualifier Limits

4-Bromofluorobenzene (Surr) 108 65 - 140

Lab Sample ID: 440-221398-B-3 MSD

Matrix: Water

Analysis Batch: 505024

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit GRO (C4-C12) 64 800 721 ug/L 82 65 - 140

MSD MSD

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 107
 65 - 140

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-504060/1-A

Matrix: Water

Analysis Batch: 504496

Client Sample ID: Method Blank
Prep Type: Total/NA

Prep Batch: 504060

MB MB
Analyte Result Qualifier

RL MDL Unit Prepared Analyzed Dil Fac DRO (C13-C22) ND 0.50 0.25 mg/L 10/10/18 10:33 10/11/18 19:52 10/10/18 10:33 ORO (C23-C40) ND 0.50 10/11/18 19:52 0.25 mg/L

TestAmerica Irvine

3

5

7

q

10

12

14

15

10

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 440-504060/1-A

Lab Sample ID: LCS 440-504060/2-A

Matrix: Water

Analysis Batch: 504496

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 504060

MB MB

%Recovery Qualifier Limits Prepared Surrogate Analyzed Dil Fac 10/10/18 10:33 10/11/18 19:52 n-Octacosane 74 45 - 120

Client Sample ID: Lab Control Sample

Matrix: Water

Analysis Batch: 504496

Prep Type: Total/NA

Prep Batch: 504060 %Rec.

Added Result Qualifier Limits Analyte Unit D %Rec C10-C28 1.00 0.437 J mg/L 44 40 - 115

LCS LCS

LCSD LCSD

LCS LCS

Spike

Spike

LCS LCS

%Recovery Qualifier Limits Surrogate 45 - 120 n-Octacosane 90

Lab Sample ID: LCSD 440-504060/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 504496

Prep Type: Total/NA

Prep Batch: 504060

RPD %Rec.

Added RPD Limit Analyte Result Qualifier Unit %Rec Limits D C10-C28 1.00 0.475 J mg/L 48 40 - 115 8 25

LCSD LCSD

%Recovery Qualifier Limits Surrogate 45 - 120 n-Octacosane 79

Lab Sample ID: MB 440-504282/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 504384

Prep Type: Total/NA

Prep Batch: 504282

мв мв

Result Qualifier RL MDL Unit D Dil Fac Analyte Prepared Analyzed DRO (C13-C22) 5.0 ND 2.5 mg/Kg 10/11/18 06:50 10/11/18 14:47 ORO (C23-C40) ND 5.0 2.5 mg/Kg 10/11/18 06:50 10/11/18 14:47

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac n-Octacosane 98 40 - 140 10/11/18 06:50 10/11/18 14:47

Lab Sample ID: LCS 440-504282/2-A

Matrix: Solid

Analysis Batch: 504384

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 504282 %Rec.

Spike Analyte babbA Result Qualifier Unit %Rec Limits C10-C28 66.7 52.2 mg/Kg 78 45 - 115

LCS LCS

%Recovery Limits Surrogate Qualifier 40 - 140 n-Octacosane 87

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 440-221792-G-2-D MS **Matrix: Solid**

Analysis Batch: 504384

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 504282 Sample Sample Spike MS MS Result Qualifier Added %Rec Result Qualifier Limits Unit

Analyte C10-C28 66.6 2.5 J 58.0 mg/Kg 83 40 - 120 MS MS

Qualifier Limits Surrogate %Recovery 40 - 140 n-Octacosane 90

Lab Sample ID: 440-221792-G-2-E MSD

Matrix: Solid

Analysis Batch: 504384

Prep Batch: 504282 Sample Sample Spike MSD MSD **RPD** Result Qualifier Added Limit Analyte Result Qualifier Limits RPD Unit %Rec C10-C28 30 J 66.6 55.0 79 40 - 120 5 2.5 mg/Kg

MSD MSD Surrogate %Recovery Qualifier Limits 40 - 140 n-Octacosane 88

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-503698/1-A

Matrix: Water

Client Sample ID: Method Blank Prep Type: Total/NA Analysis Batch: 504021 **Prep Batch: 503698** MR MR

	INID	IND							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1
Aroclor 1221	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1
Aroclor 1232	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1
Aroclor 1242	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1
Aroclor 1248	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1
Aroclor 1254	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1
Aroclor 1260	ND		1.0	0.50	ug/L		10/09/18 06:24	10/10/18 12:37	1

MB MB

%Recovery Limits Dil Fac Surrogate Qualifier Prepared Analyzed 26 - 115 10/09/18 06:24 DCB Decachlorobiphenyl (Surr) 93 10/10/18 12:37

Lab Sample ID: LCS 440-503698/4-A

Matrix: Water

Analysis Batch: 504021

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 503698

	Spike	LCS	LCS			%Rec.
Analyte	Added	Result	Qualifier Ur	it D	%Rec	Limits
Aroclor 1016	 4.00	2.46	ug	/L	61	50 - 115
Aroclor 1260	4.00	3.09	ug	/L	77	53 - 120

LCS LCS Surrogate %Recovery Qualifier Limits 26 - 115 DCB Decachlorobiphenyl (Surr) 77

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

DCB Decachlorobiphenyl (Surr)

DCB Decachlorobiphenyl (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 440-503698/5-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA Analysis Batch: 504021 **Prep Batch: 503698**

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Aroclor 1016	4.00	3.06		ug/L		76	50 - 115	18	22	
Aroclor 1260	4.00	3.30		ug/L		82	53 - 120	3	16	

LCSD LCSD Surrogate %Recovery Qualifier I imits DCB Decachlorobiphenyl (Surr) 77 26 - 115

Lab Sample ID: MB 440-504287/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 504378 Prep Batch: 504287 мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1
Aroclor 1221	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1
Aroclor 1232	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1
Aroclor 1242	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1
Aroclor 1248	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1
Aroclor 1254	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1
Aroclor 1260	ND		50	17	ug/Kg		10/11/18 07:11	10/11/18 16:30	1

MB MB %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed DCB Decachlorobiphenyl (Surr) 45 - 120 10/11/18 07:11 10/11/18 16:30 105

Lab Sample ID: LCS 440-504287/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 504378 Prep Batch: 504287

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits 267 Aroclor 1016 245 ug/Kg 92 65 - 115

Aroclor 1260 267 254 ug/Kg 65 - 115 LCS LCS Surrogate %Recovery Qualifier Limits

45 - 120

95

88

Lab Sample ID: 440-221812-A-66-B MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA Analysis Batch: 504378 Prep Batch: 504287

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aroclor 1016	ND		265	244		ug/Kg		92	50 - 120	
Aroclor 1260	ND		265	262		ug/Kg		99	50 - 125	

Surrogate	%Recovery	Qualifier	Limits				
	MS	MS					
Aroclor 1260	ND		265	262	ug/Kg	99	50 - 125
7 (100)01 1010	110		200		agritg	U_	00 - 120

45 - 120

QC Sample Results

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

%Recovery Qualifier

89

Lab Sample ID: 440-221812-A-66-E MSD

Matrix: Solid

Surrogate

Analysis Batch: 504378

DCB Decachlorobiphenyl (Surr)

Client Sample ID: M	atrix Spike Duplicate
	Prep Type: Total/NA

Prep Batch: 504287

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aroclor 1016	ND		266	247		ug/Kg		93	50 - 120	1	30
Aroclor 1260	ND		266	267		ug/Kg		101	50 - 125	2	30
	MSD	MSD									

Limits 45 - 120

QC Association Summary

Client: Parsons Corporation Project/Site: LAUSD Reseda H.S., CA TestAmerica Job ID: 440-221644-1

GC/MS VOA

Analysis Batch: 503694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-1	AOC4-SV17-5	Total/NA	Solid	8260B	503776
440-221644-2	AOC4-SV17-15	Total/NA	Solid	8260B	503776
440-221644-4	AOC4-SV16-5	Total/NA	Solid	8260B	503776
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	8260B	503776
440-221644-6	AOC4-SV16-15	Total/NA	Solid	8260B	503776
MB 440-503694/5	Method Blank	Total/NA	Solid	8260B	
LCS 440-503694/6	Lab Control Sample	Total/NA	Solid	8260B	
440-221605-B-9 MS	Matrix Spike	Total/NA	Solid	8260B	
440-221605-B-9 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	

Prep Batch: 503776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-1	AOC4-SV17-5	Total/NA	Solid	5035	
440-221644-2	AOC4-SV17-15	Total/NA	Solid	5035	
440-221644-4	AOC4-SV16-5	Total/NA	Solid	5035	
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	5035	
440-221644-6	AOC4-SV16-15	Total/NA	Solid	5035	

Analysis Batch: 504839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-3	TB-20181006	Total/NA	Water	8260B	
440-221644-7	EB-20181006	Total/NA	Water	8260B	
MB 440-504839/4	Method Blank	Total/NA	Water	8260B	
LCS 440-504839/5	Lab Control Sample	Total/NA	Water	8260B	
440-221818-A-18 MS	Matrix Spike	Total/NA	Water	8260B	
440-221818-A-18 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 504895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	8015B	<u> </u>
MB 440-504895/53	Method Blank	Total/NA	Solid	8015B	
LCS 440-504895/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-504895/52	Lab Control Sample Dup	Total/NA	Solid	8015B	
440-221711-A-1 MS	Matrix Spike	Total/NA	Solid	8015B	
440-221711-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	

Analysis Batch: 505023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
440-221644-1	AOC4-SV17-5	Total/NA	Solid	8015B	_
440-221644-2	AOC4-SV17-15	Total/NA	Solid	8015B	
440-221644-4	AOC4-SV16-5	Total/NA	Solid	8015B	
440-221644-6	AOC4-SV16-15	Total/NA	Solid	8015B	
MB 440-505023/5	Method Blank	Total/NA	Solid	8015B	
LCS 440-505023/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-505023/4	Lab Control Sample Dup	Total/NA	Solid	8015B	
440-221644-1 MS	AOC4-SV17-5	Total/NA	Solid	8015B	
440-221644-1 MSD	AOC4-SV17-5	Total/NA	Solid	8015B	

TestAmerica Irvine

Page 45 of 51

4

6

Q

9

11

12

13

14

1

QC Association Summary

Client: Parsons Corporation

TestAmerica Job ID: 440-221644-1 Project/Site: LAUSD Reseda H.S., CA

GC VOA (Continued)

Analysis Batch: 505024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-7	EB-20181006	Total/NA	Water	8015B	
MB 440-505024/4	Method Blank	Total/NA	Water	8015B	
LCS 440-505024/3	Lab Control Sample	Total/NA	Water	8015B	
440-221398-B-3 MS	Matrix Spike	Total/NA	Water	8015B	
440-221398-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 503698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-7	EB-20181006	Total/NA	Water	3510C	
MB 440-503698/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-503698/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-503698/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 504021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-7	EB-20181006	Total/NA	Water	8082	503698
MB 440-503698/1-A	Method Blank	Total/NA	Water	8082	503698
LCS 440-503698/4-A	Lab Control Sample	Total/NA	Water	8082	503698
LCSD 440-503698/5-A	Lab Control Sample Dup	Total/NA	Water	8082	503698

Prep Batch: 504060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method P	rep Batch
440-221644-7	EB-20181006	Total/NA	Water	3510C	
MB 440-504060/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-504060/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-504060/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 504282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
440-221644-1	AOC4-SV17-5	Total/NA	Solid	3546	
440-221644-2	AOC4-SV17-15	Total/NA	Solid	3546	
440-221644-4	AOC4-SV16-5	Total/NA	Solid	3546	
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	3546	
440-221644-6	AOC4-SV16-15	Total/NA	Solid	3546	
MB 440-504282/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-504282/2-A	Lab Control Sample	Total/NA	Solid	3546	
440-221792-G-2-D MS	Matrix Spike	Total/NA	Solid	3546	
440-221792-G-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 504287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-1	AOC4-SV17-5	Total/NA	Solid	3546	 -
440-221644-2	AOC4-SV17-15	Total/NA	Solid	3546	
440-221644-4	AOC4-SV16-5	Total/NA	Solid	3546	
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	3546	
440-221644-6	AOC4-SV16-15	Total/NA	Solid	3546	
MB 440-504287/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-504287/2-A	Lab Control Sample	Total/NA	Solid	3546	

10/15/2018

Page 46 of 51

QC Association Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

GC Semi VOA (Continued)

Prep Batch: 504287 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221812-A-66-B MS	Matrix Spike	Total/NA	Solid	3546	
440-221812-A-66-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 504378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-1	AOC4-SV17-5	Total/NA	Solid	8082	504287
440-221644-2	AOC4-SV17-15	Total/NA	Solid	8082	504287
440-221644-4	AOC4-SV16-5	Total/NA	Solid	8082	504287
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	8082	504287
440-221644-6	AOC4-SV16-15	Total/NA	Solid	8082	504287
MB 440-504287/1-A	Method Blank	Total/NA	Solid	8082	504287
LCS 440-504287/2-A	Lab Control Sample	Total/NA	Solid	8082	504287
440-221812-A-66-B MS	Matrix Spike	Total/NA	Solid	8082	504287
440-221812-A-66-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	504287

Analysis Batch: 504384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-221644-1	AOC4-SV17-5	Total/NA	Solid	8015B	504282
440-221644-2	AOC4-SV17-15	Total/NA	Solid	8015B	504282
440-221644-4	AOC4-SV16-5	Total/NA	Solid	8015B	504282
440-221644-5	AOC4-SV16-5D	Total/NA	Solid	8015B	504282
440-221644-6	AOC4-SV16-15	Total/NA	Solid	8015B	504282
MB 440-504282/1-A	Method Blank	Total/NA	Solid	8015B	504282
LCS 440-504282/2-A	Lab Control Sample	Total/NA	Solid	8015B	504282
440-221792-G-2-D MS	Matrix Spike	Total/NA	Solid	8015B	504282
440-221792-G-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	504282

Analysis Batch: 504496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method F	rep Batch
440-221644-7	EB-20181006	Total/NA	Water	8015B	504060
MB 440-504060/1-A	Method Blank	Total/NA	Water	8015B	504060
LCS 440-504060/2-A	Lab Control Sample	Total/NA	Water	8015B	504060
LCSD 440-504060/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	504060

TestAmerica Irvine

2

__

0

0

10

46

13

14

13

Definitions/Glossary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

ND PQL

QC

RL

RER

RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Quality Control

Accreditation/Certification Summary

Client: Parsons Corporation

Project/Site: LAUSD Reseda H.S., CA

TestAmerica Job ID: 440-221644-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19
The following analytes are included in the the agency does not offer certification.	nis report, but the laboratory is not certi	fied by the governir	ng authority. This list may inclu	ude analytes for which

Analysis Method	Prep Method	Matrix	Analyte	
8015B		Solid	GRO (C4-C12)	
8015B		Water	GRO (C4-C12)	
8015B	3510C	Water	DRO (C13-C22)	
8015B	3510C	Water	ORO (C23-C40)	
8015B	3546	Solid	DRO (C13-C22)	

8015B		Solid	GRO (C4-C12)	
8015B		Water	GRO (C4-C12)	
8015B	3510C	Water	DRO (C13-C22)	
8015B	3510C	Water	ORO (C23-C40)	
8015B	3546	Solid	DRO (C13-C22)	
8015B	3546	Solid	ORO (C23-C40)	
8260B		Water	m,p-Xylene	
8260B	5035	Solid	m,p-Xylene	

206836 **Chain of Custody Record** TestAmerica Irvine 17461 Derian Ave

REPRESENTATION OF THE LEADER IN ENVIRONMENTAL TESTING TESTING TESTING.

Testamerico O

Irvine, C8 92614 Phone: 949.261.1022 Fax:

		Regulatory Program: Dw Dw	DES 🗌 RCRA 🔲 Other:		TAL-8210 (0713)
	Client Contact	Project Manager: Townin King	Site Contact: C. Cmz P	Date: 10/6/16	COC No: 1
	Company Name Cocco	900 570	Lab Contact:	Carrier:	sooo — jo 🧻
	وا	Sis			Sampler:
	City/State/Zip: Passadron CA 91/24	CALENDAR DAYS WORKING DAYS			For Lab Use Only:
	Phone 626 440 6133	TAT if different from Below	(N		Walk-in Client
		2 weeks	7. /.k		Lab Sampling:
	Project Name (Lesecha HS	1 week			
	Site P.O.#	2 days			Job / SDG No :
		L Cay	SW		
	Sample Identification	Sample Sample (C=Comp. Date Time G=Grab) Matrix Cont.	Filtered S Perform I GKO VOX OBC OBC OCC OCC OCC OCC OCC OCC OCC OCC		Sample Specific Notes:
	Acc4-5017-5	W6118 00847 G S S	7 4 7 4		
	Acc4-5N17-15	5 9 906	イメメメ		
	TB-24\$1006	10/6/2 10/5 G W 3			2
Р	A0C4-5V16-5	1026	メメメ		1/0
age	AdC4-5016-5D	0501	メメメ		3/1
50	AOC4 -5V16-15	1045 (P)
of 5	EB-20181006	6 /7 9 0011 8119/A			
1					
				440-221644 Chain of Custody	
					- Andrews - Andr
	Preservation Used: 1= ice, 2= HCi; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other	5=NaOH; 6= Other			
	Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste C Comments Section if the lab is to dispose of the sample	se List any EPA Waste Codes for the sample in the		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	longer than 1 month)
	Non-Hazard Flammable Skin Irritant	Dolson B Unknown	Return to Client	Disposal by Lab	Months
	Special Instructions/QC Requirements & Comments:	vocs include MEK and MTBE			
	s Intact 📋 Yes 📋 No	Custody Seal No.	Cooler Temp ('C) Obs'd		Therm ID No
	2K.	Company	Received by 100	Company — (M	Date/Time 10 6 18 120 0
	Relinquished by (<u> </u>	Received by	Company	Daté/Tirhe
15/20	Relinquished by	Company Date/Time	Received in Laboratory by:	Company:	Date (Time)
18					()

4.1/4.4 IRGE

Login Sample Receipt Checklist

Client: Parsons Corporation Job Number: 440-221644-1

Login Number: 221644 List Source: TestAmerica Irvine

List Number: 1

Creator: Soderblom, Tim

Creator. Societioni, Tilli		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

2

3

1

_

7

0

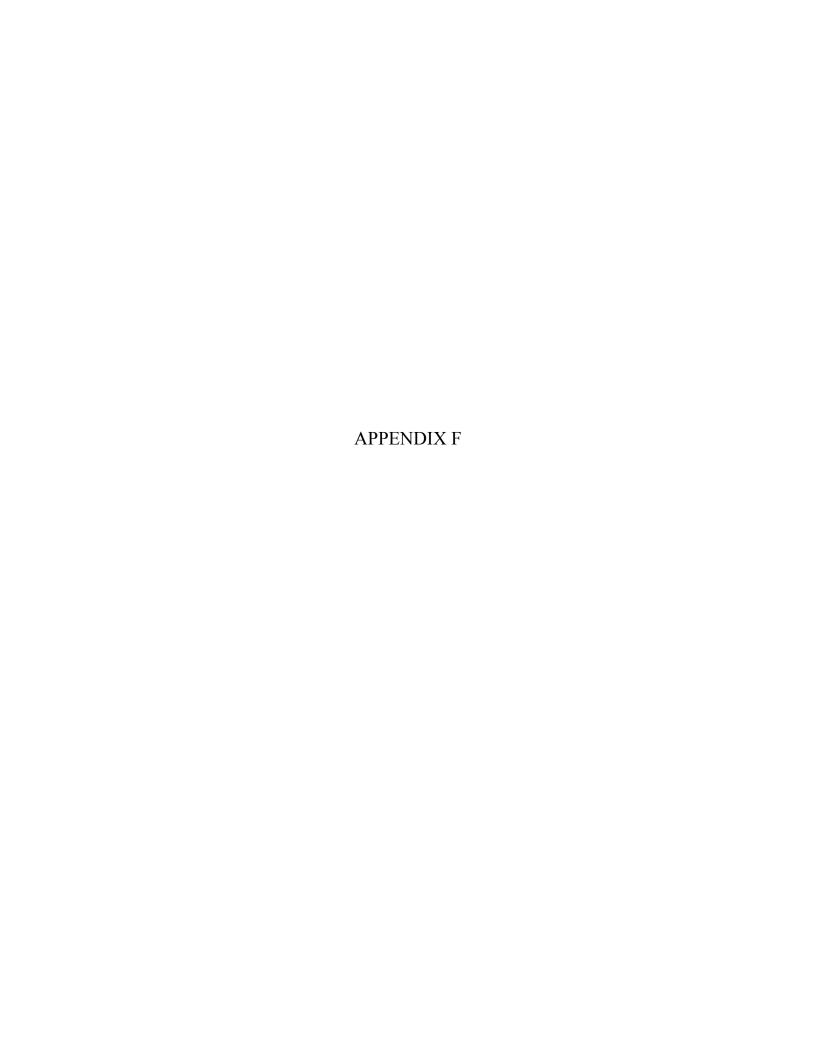
10

12

13

7

15





714-449-9937 | 11007 F0 562-646-1611 | SANTA | 805-399-0060 | WWW.J0

11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL SAMPLING METHODOLOGY & LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Report date: 10/7/2018 **JEL Ref. No.:** ST-12769

Client Ref. No.: 450810

Date Sampled: 10/5/2018

Date Received: 10/6/2018 **Date Analyzed:** 10/6-7/2018

Physical State: Indoor Air

ANALYSES REQUESTED

1. EPA TO-15 – Volatile Organics by GC/MS

Sampling – Indoor Air samples were collected in 6 Liter SUMMA Canisters over an 8-hour period.

Analytical – Indoor Air 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

714-449-9937 562-646-1611 805-399-0060 11007 FOREST PLACE Santa Fe Springs, Ca 90670 Www.jonesenv.com

10/7/2018

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date:

Client Address: 100 W. Walnut Street Jones Ref. No.: ST-12769
Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 10/5/2018

Project: Reseda High School Date Received: 10/6/2018

Pate Analyzed: 10/6-7/2018

Project Address: 18230 Kittridge Street Physical State: Indoor Air

Reseda, CA

EPA TO-15 - Volatile Organics by GC/MS in Air

Sample ID:	OAS-1	IAS-1	IAS-2	IAS-3	IAS-4		
Jones ID:	ST-12769-01	ST-12769-02	ST-12769-03	ST-12769-04	ST-12769-05	Reporting Limit	<u>Units</u>
Analytes:							
Benzene	0.38	0.45	0.44	0.46	0.44	0.10	$\mu g/m3$
Tetrachloroethene	0.13	0.16	0.22	0.30	0.15	0.10	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Surrogate Recovery: 4-Bromofluorobenzene	99%	100%	100%	99%	100%	<u>OC Limit</u> 60 - 140	
	TO 1 100 (10	TO1 100(10	TO 1 100 (10	TO 1 100 (10	TO1 100610		

TO1-100618- TO1-100618- TO1-100618- TO1-100618- TO1-100618- O1 O1 O1 O1

Report date:

Reporting Limit

10/7/2018

Units

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street Jones Ref. No.: ST-12769

Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 10/5/2018

Reseda High School

Date Received: 10/6/2018

Date Analyzed: 10/6-7/2018

Project:Reseda High SchoolDate Analyzed:10/6-7/2018Project Address:18230 Kittridge StreetPhysical State:Indoor Air

Reseda, CA

EPA TO-15 - Volatile Organics by GC/MS in Air

Sample ID: OAS-3 OAS-2

<u>Jones ID:</u> ST-12769-06 ST-12769-07

Analytes:

 Benzene
 0.42
 0.43
 0.10
 μg/m3

 Tetrachloroethene
 0.15
 0.15
 0.10
 μg/m3

Dilution Factor 1 1

Surrogate Recovery:QC Limits4-Bromofluorobenzene99%99%60 - 140

TO1-100618- TO1-100618-

Report date:

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Date Sampled: 10/5/2018

Jones Ref. No.: ST-12769

Client Ref. No.: 450810

10/7/2018

Date Received: 10/6/2018 **Date Analyzed:** 10/6-7/2018

Physical State: Indoor Air

EPA TO-15 - Volatile Organics by GC/MS in Air

Sample ID: METHOD BLANK

100618-

Jones ID: Reporting Limit Units

Analytes:

Benzene ND 0.10 $\mu g/m3$ Tetrachloroethene ND 0.10 $\mu g/m3$

Dilution Factor 1

Surrogate Recovery:QC Limits4-Bromofluorobenzene97%60 - 140

TO1-100618-

714-449-9937 562-646-1611 805-399-0060

11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL **QUALITY CONTROL INFORMATION**

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Justin King Attn:

Project: Reseda High School 18230 Kittridge Street **Project Address:**

Reseda, CA

Report date: 10/7/2018 Jones Ref. No.: ST-12769

Client Ref. No.: 450810

Date Sampled: 10/5/2018 **Date Received:** 10/6/2018 **Date Analyzed:** 10/6-7/2018

Physical State: Indoor Air

EPA TO-15 – Volatile Organics by GC/MS in Air

Sample Spiked:	Ambient	GC#:	TO1-100618-01			
Jones ID:	100618-TO1CCV1	100618-TO1CC				
<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)		
Vinyl Chloride	73%	78%	6.4%	70-130		
1,1-Dichloroethylene Cis-1,2-Dichloroethene	84% 83%	87% 92%	3.7% 10.0%	70-130 70-130		
1,1,1-Trichloroethane Benzene	94% 100%	95% 103%	1.7% 3.1%	70-130 70-130		
Trichloroethylene	92%	100%	8.3%	70-130		
Toluene Tetrachloroethene	102% 110%	105% 119%	3.1% 8.4%	70-130 70-130		
Chlorobenzene Ethylbenzene	112% 105%	115% 108%	2.8% 3.0%	70-130 70-130		
1,2,4 Trimethylbenzene	102%	106%	4.6%	70-130		
Surrogate Recovery:	0004	2007		60 440		
4-Bromofluorobenzene	98%	98%		60 - 140		

MS = Matrix Spike

MSD = Matrix Spike Duplicate



11007 Forest PI.
Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.ioneseny.com

Soil-Gas Chain of Custody Record

Project Address 18230 Kith	Parsons lect Name Peseda High School				Date 10-5-17 Client Project # 450 87 Turn Around R Immediate A	□ 1P Shu Flow R	Purge Number: 1P 3P 7P 10P Shut-In Test: Y / N Flow Rate: If different than above, see Notes. Tracer: n-pentane n-hexane			Report Options EDD EDF* - 10% Surcharge *Global ID Analysis Requested					Jones Project # ST-1276 9 Page of Sample Condition as Recieved:			
Email Phone Report To TUSTIN King		Sampler	0 = 0	CT				Rush 48 Hours Rush 72 Hours Normal Mobile Lab Reporting Limits Requested:		n-heptane Helium 1,1-DFA Units:		- nits:	atrix: 3), Air (A)	98	15 (PCE BONG	Magnehelic Vacuum (In/H ₂ O)	Containers	Sealed ves no Sample Container: SUMM C If different than above, see Notes.
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 (EPA 826	EPA TO-15	Magneheli	Number of	Notes & Special Instructions	
0AS-1			10/5			ST-12769-01	B2674	-24	0	0719	1450			X		1		
TAS-1			10/5			ST-12769-02			0	0714	1456	84		×		1		
IAS-2			10/2			5-12769-03	B2677	-28	0	ดาก	1458	86		X		1		
IAS-3			10/5			ST12769-04			1	016		36		x		1		
IAS-4			10/5			ST-12769-05			1	0715	1507	86		X		1		
0A5-3			1015			ST-12769-06			2	710	1814	86		X		1		
OBS-2			10/5			51-12719-07		1000		0119	1000	80		χ		١		
																7		
Relinquished By (Signature)	-	Printed Nam	inki	rg Time:		Received By (Signature)	Tarre		A	ed Name	ix0"		70	1	١,	1	Total Number of Containers	
telinquished By (Signature)	10-5		16	915	con	Received By Laboratory (Enviro	on men	Print	10-5 ed Name Ougle	is Fo	161	ler	- a	cons	stitutes es hav	ature on this Chain of Custody form s acknowledgement that the above ye been reqested, and the information d herein is correct and accurate.	



JONES ENVIRONMENTAL SAMPLING METHODOLOGY & LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Report date: 10/8/2018 **JEL Ref. No.:** ST-12770

Client Ref. No.: 450810

Date Sampled: 10/6/2018

Date Received: 10/6/2018 **Date Analyzed:** 10/6-8/2018

Physical State: Indoor Air

ANALYSES REQUESTED

1. EPA TO-15 – Volatile Organics by GC/MS

Sampling – Indoor Air samples were collected in 6 Liter SUMMA Canisters over an 8-hour period.

Analytical – Indoor Air 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:

David Mirakian, M.S. Stationary Lab Chemist

714-449-9937 11007 FOREST PLACE 562-646-1611 SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 10/8/2018
Client Address: 100 W. Walnut Street Jones Ref. No.: ST-12770

Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 10/5/2018

Project: Reseda High School Date Analyzed: 10/6-8/2018
Project Address: 18230 Kittridge Street Physical State: Indoor Air

Project Address: 18230 Kittridge Street Reseda, CA

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	OAS-1	OAS-2	OAS-3	IAS-1	IAS-1 REP		
Jones ID:	ST-12770-01	ST-12770-02	ST-12770-03	ST-12770-04	ST-12770-05	Reporting Limit	<u>Units</u>
Analytes:							
Benzene	0.60	0.61	0.35	0.96	0.93	0.10	$\mu g/m3$
Tetrachloroethene	0.21	0.20	0.14	0.25	0.26	0.10	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						QC Limi	ts
4-Bromofluorobenzene	100%	101%	107%	100%	102%	60 - 140	

TO1-100618- TO1-100618- TO1-100718- TO1-100718- TO1-100718- IA-CHECKS IA-CHECKS IA-CHECKS IA-CHECKS

Report date:

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Date Sampled: 10/5/2018

Jones Ref. No.: ST-12770

Client Ref. No.: 450810

Date Received: 10/6/2018 **Date Analyzed:** 10/6-8/2018

10/8/2018

Physical State: Indoor Air

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID: IAS-2 IAS-3 IAS-4

Jones ID:	ST-12770-06	ST-12770-07	ST-12770-08	Reporting Limit	<u>Units</u>
Analytes: Benzene Tetrachloroethene	0.82 0.23	0.78 0.39	1.06 0.26	0.10 0.10	μg/m3 μg/m3
Dilution Factor	1	1	1		
<u>Surrogate Recovery:</u> 4-Bromofluorobenzene	101%	100%	98%	QC Limits 60 - 140	<u> </u>

TO1-100718- TO1-100718- TO1-100818-IA-CHECKS IA-CHECKS IA-CHECKS

Report date:

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Date Sampled: 10/5/2018

Jones Ref. No.: ST-12770

Client Ref. No.: 450810

Date Received: 10/6/2018 **Date Analyzed:** 10/6-8/2018

10/8/2018

Physical State: Indoor Air

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID:	METHOD BLANK	METHOD BLANK	METHOD BLANK	
Jones ID:	100618- HBLK6	100718- HBLK6	100818- HBLK6	Reporting Limit Units
Analytes:				
Benzene	ND	ND	ND	0.100 µg/m3
Tetrachloroethene	ND	ND	ND	0.100 µg/m3
Dilution Factor	1	1	1	
Surrogate Recovery: 4-Bromofluorobenzene	97%	98%	99%	<u>QC Limits</u> 60 - 140

TO1-100618- TO1-100718- TO1-100818-IA-CHECKS IA-CHECKS IA-CHECKS

Report date:

Jones Ref. No.:

Date Sampled:

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Client Ref. No.: 450810

Date Received: 10/6/2018 **Date Analyzed:** 10/6-8/2018

10/8/2018

ST-12770

10/5/2018

Physical State: Indoor Air

EPA TO-15 – Volatile Organics by GC/MS in Air/ Summa Canister

Sample Spiked: HUMIDIFIED NITROGEN GC#: TO1-100618-IA-CHECKS

Jones ID:

<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Vinyl Chloride	73%	78%	6.4%	70-130
1,1-Dichloroethylene	84%	87%	3.7%	70-130
Cis-1,2-Dichloroethene	83%	92%	10.0%	70-130
1,1,1-Trichloroethane	94%	95%	1.7%	70-130
Benzene	100%	103%	3.1%	70-130
Trichloroethylene	92%	100%	8.3%	70-130
Toluene	102%	105%	3.1%	70-130
Tetrachloroethene	110%	119%	8.4%	70-130
Chlorobenzene	112%	115%	2.8%	70-130
Ethylbenzene	105%	108%	3.0%	70-130
1,2,4 Trimethylbenzene	102%	106%	4.6%	70-130
Surrogate Recovery: 4-Bromofluorobenzene	98%	98%		60 - 140

MS = Matrix Spike

MSD = Matrix Spike Duplicate

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Report date: 10/8/2018 **Jones Ref. No.:** ST-12770

Client Ref. No.: 450810

Date Sampled: 10/5/2018 **Date Received:** 10/6/2018 **Date Analyzed:** 10/6-8/2018

Physical State: Indoor Air

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample Spiked: HUMIDIFIED NITROGEN GC#: TO1-100718-IA-CHECKS

Jones ID:

Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
<u>1 drameter</u>	Recovery (70)	Recovery (70)	<u>KI D</u>	Range (70)
Vinyl Chloride	74%	79%	6.2%	70-130
1,1-Dichloroethylene	85%	86%	0.9%	70-130
Cis-1,2-Dichloroethene	84%	92%	9.1%	70-130
1,1,1-Trichloroethane	95%	94%	0.8%	70-130
Benzene	101%	106%	4.7%	70-130
Trichloroethylene	92%	102%	9.9%	70-130
Toluene	101%	105%	3.9%	70-130
Tetrachloroethene	114%	123%	8.1%	70-130
Chlorobenzene	106%	114%	8.0%	70-130
Ethylbenzene	102%	110%	7.5%	70-130
1,2,4 Trimethylbenzene	103%	108%	4.5%	70-130
Surrogate Recovery:				
4-Bromofluorobenzene	100%	100%		60 - 140

MS = Matrix Spike

MSD = Matrix Spike Duplicate

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Report date: 10/8/2018 **Jones Ref. No.:** ST-12770

Client Ref. No.: 450810

Date Sampled: 10/5/2018 **Date Received:** 10/6/2018 **Date Analyzed:** 10/6-8/2018

Physical State: Indoor Air

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample Spiked: HUMIDIFIED NITROGEN GC#: TO1-100818-IA-CHECKS

Jones ID:

	CCV	CCVD		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)
Vinyl Chloride	81%	78%	4.0%	70-130
J				
1,1-Dichloroethylene	88%	90%	2.7%	70-130
Cis-1,2-Dichloroethene	94%	92%	1.7%	70-130
1,1,1-Trichloroethane	101%	94%	6.6%	70-130
Benzene	106%	106%	0.8%	70-130
Trichloroethylene	100%	98%	1.6%	70-130
Toluene	107%	106%	0.7%	70-130
Tetrachloroethene	119%	117%	2.0%	70-130
Chlorobenzene	112%	114%	2.1%	70-130
Ethylbenzene	110%	110%		70-130
1,2,4 Trimethylbenzene	110%	109%	1.5%	70-130
Surrogate Recovery:				
4-Bromofluorobenzene	102%	98%		60 - 140

MS = Matrix Spike

MSD = Matrix Spike Duplicate



11007 Forest PI.
Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.ionesenv.com

Soil-Gas Chain of Custody Record

Client Parsons Project Name Pesca High s Project Address 18230 Kithre	schoo	70	AL, IN	C,		Date 10-6-1 Client Project # 450811	8	□ 1F _ Sh Flow F	Purge Number: 1P 3P 7P 10P Shut-In Test: Y / N Flow Rate:					Jones Project ST-12 Page			Jones Project # ST-12770 Page
Reseda CA						□ Immediate Attention Rush 24 Hours □ Rush 48 Hours □ Rush 72 Hours □ Normal □ Mobile Lab Reporting Limits Reque		n-pentane n-hexane n-heptane Helium 1,1-DFA				A)		PCE, benzeme)	suum (In/H ₂ O)	Containers	Sample Condition as Recieved: Sealed pes no Sample Container: Summa
Justin King	7	Sampler	0			□ Comr	quested: Residential	Ř:	Ur	nits:	Matrix: SG), Air	60B	TO-15	elic Va			
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 Soil Gas	EPA 82	EPA TO	Magnehelic	Number of	Notes & Special Instructions
0AS-1			10/6			5-12770-01	132480	-30	-3	5718		86		X	_	1	
0AS-2			10/4			ST-12770-02			-4	0719	1514	86		χ		1	
0AS-3			1016			ST-12770-03	1388	-30	-3	015	1250	86		X		1	
IAS-1			10/6			51-12770-01	B2468			0113				X		1	
IAS-IREP			10/6			55-12770-05	B2412	-30	-4	0113	1455	86		X		1	
IAS-2			10/6			ST-12770-06	B2474	-30		งกา				X		1	
IAS-3			10/6			57-12770-07	BZGCeq	-29	-2	0116	1458	86		X		1	
IAS-4			10/6			ST-12770-08	1596	-30	- 1	014	1285	86		X		1	
												8					
elinquished By (Signature)	(Printed Nan	Cuz			Received By (Signature)	Tou	<u> </u>	A	ed Name			in	,		8	Total Number of Containers
elinquished By (Signature)	[07	Date:	ne uin	549 570	we.	Received By Laboratory	Signature Pavilon	mentry	Date:	10- ed Name Neglas	6-18 For	18			cons	stitute: es hav	ature on this Chain of Custody form s acknowledgement that the above we been reqested, and the information d herein is correct and accurate.

Report date:

JEL Ref. No.:

JONES ENVIRONMENTAL SAMPLING METHODOLOGY & LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

Client Ref. No.: 450810

10/8/2018

ST-12771

Date Sampled: 10/6/2018

Date Received: 10/6/2018 **Date Analyzed:** 10/7/2018

Physical State: Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – 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 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe.

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.

Approval:

Angela Haar, Ph. D. Mobile Lab Manager

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 10/8/2018 **Client Address:** 100 W. Walnut Street Jones Ref. No.: ST-12771 Pasadena, CA 91124 Client Ref. No.: 450810 Justin King **Date Sampled:** 10/6/2018 Attn: **Date Received:** 10/6/2018 **Project:** Reseda High School **Date Analyzed:** 10/7/2018 **Project Address:** 18230 Kittridge Street **Physical State:** Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS

Sample ID:	AOC4-SS5	AOC4-SS12	AOC4-SS3	AOC4-SS7	
Jones ID:	ST-12771-01	ST-12771-02	ST-12771-03	ST-12771-04	Reporting Limit Units
Analytes:					
Benzene	ND	ND	ND	ND	$3 \mu g/m3$
Tetrachloroethene	19	127	374	9	$3 \mu g/m3$
Tracer:					
n-Pentane	ND	ND	ND	4390E	30 μg/m3
n-Hexane	ND	ND	ND	3600E	30 μg/m3
n-Heptane	ND	ND	ND	3490E	$\mu g/m3$
Dilution Factor	1	1	1	1	
Surrogate Recoveries:					QC Limits
Dibromofluoromethane	111%	105%	107%	109%	60 - 140
Toluene-d ₈	98%	99%	100%	103%	60 - 140
4-Bromofluorobenzene	101%	97%	101%	101%	60 - 140
	E1-100718-	E1-100718-	E1-100718-	E1-100718-	
	01	01	01	01	

ND= Value less than reporting limit

E = Estimated value

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 10/8/2018 100 W. Walnut Street **Client Address:** Jones Ref. No.: ST-12771 Pasadena, CA 91124 **Client Ref. No.:** 450810 Justin King **Date Sampled:** 10/6/2018 Attn: **Date Received:** 10/6/2018 **Project:** 10/7/2018

Project:Reseda High SchoolDate Analyzed:10/7/201Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Sample ID:	METHOD BLANK	SAMPLING BLANK	
Jones ID:	100718- E1MB1	100718- E1SB1	Reporting Limit Units
Analytes:			
Benzene	ND	ND	$3 \mu g/m3$
Tetrachloroethene	ND	ND	$\frac{1}{2}$ $\frac{1}{\mu g/m^3}$
Tracer:			
n-Pentane	ND	ND	$30 \mu g/m3$
n-Hexane	ND	ND	$30 \mu g/m3$
n-Heptane	ND	ND	$30 \mu g/m3$
Dilution Factor	1	1	
Surrogate Recoveries:			QC Limits
Dibromofluoromethane	110%	111%	60 - 140
Toluene-d ₈	100%	99%	60 - 140
4-Bromofluorobenzene	102%	96%	60 - 140
	E1-100718-	E1-100718-	
	01	01	

ND= Value less than reporting limit

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 10/8/2018

Client Address: 100 W. Walnut Street Jones Ref. No.: ST-12771

Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 10/6/2018

Project: Reseda High School Date Analyzed: 10/6/2018
Project Address: 18230 Kittridge Street Physical State: Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Batch ID: E1-100718-01

Longs ID: 100718-F1LCS1 100718-F1LCSD1 100718-F1CCV1

Jones ID:	100718-E1LCS1	100718-E1LCSD1		10	00718-E1CC	V1
	LCS	LCSD		Acceptability		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	RPD	Range (%)	<u>CCV</u>	Range (%)
Vinyl chloride	111%	104%	7.2%	60 - 140	98%	80 - 120
1,1-Dichloroethene	110%	106%	4.2%	60 - 140	93%	80 - 120
Cis-1,2-Dichloroethene	127%	127%	0.2%	70 - 130	109%	80 - 120
1,1,1-Trichloroethane	136%	135%	0.1%	70 - 130	124%	80 - 120
Benzene	113%	110%	2.8%	70 - 130	111%	80 - 120
Trichloroethene	106%	102%	3.5%	70 - 130	110%	80 - 120
Toluene	104%	103%	1.2%	70 - 130	101%	80 - 120
Tetrachloroethene	106%	105%	1.0%	70 - 130	106%	80 - 120
Chlorobenzene	98%	101%	3.5%	70 - 130	103%	80 - 120
Ethylbenzene	105%	104%	0.4%	70 - 130	97%	80 - 120
1,2,4 Trimethylbenzene	93%	92%	1.9%	70 - 130	98%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	106%	105%		60 - 140	97%	60 - 140
Toluene-d ₈	96%	100%		60 - 140	96%	60 - 140
4-Bromofluorobenzene	103%	101%		60 - 140	107%	60 - 140

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample Duplicate

CCV = Continuing Calibration Verification

RPD = Relative Percent Difference; Acceptability range for RPD is $\leq 20\%$



11007 Forest PI. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Soil-Gas Chain of Custody Record

Client Parsons Project Name Pereda High Project Address 18230 Kitte Resoda, CA Email	Schi	orc e st		C.		Date 10 - (0 - (3)) Client Project # 4	Flow Rate: If different than above, see Notes. Tracer: n-pentane n-hexane n-heptane Helium 1,1-DFA				Report Options EDD Surcharge *Global ID *Global ID *Bamble Matrix: Soil Gas (So), Air (A) Analysis Requested Analysis Requested Wagnehelic Vacuum (In/H ₂ O) Magnehelic Vacuum (In/H ₂ O) Magnehelic Containers				ted	Jones Project # STYNTT Page of Sample Condition as Recieved: Sealed yes no Sample Container:	
Report To JUSTIN KING		Sampler	10			Reporting Limits Requested: □ Commercial			Un	its:	Matrix: (SG), Air	80B	-15	elic Va	of Cor		
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 N	EPA 8260B	EPA TO-15	Magnehe	Number of	Notes & Special Instructions
AOC4-555	1	125	10/6			57-12771-01	1510	-32	-5	1507	1216			X		1	
AUL4-5512	1	125	10/6			57-12771-02	1511	-29	-5	1543	1550	86		X		1	
AOL4-553	1	res	10/6			ST-12711 03	B2443	-29	-1	1538	1345	86		X		1	
AOC4-SST	1	125	1016			ST1277+04			-4	1528	,	86		X		1	
				9													
Palinguished Dv (Standure)		Drinted Nor				Descripted Dy (Signature)			Print	ad Nama				O I			
Relinquished By (Signature) Company Relinquished By (Signature) Company	1	Printed Nar Car Date: 0-6-19 Printed Nar Date:	e C	Time:		Company Compan	Envir Envir (Signature)		Date Of Print	IV-to ted Name IV-to ted Name IV-glas IV-to IV-t	For Time	22	2	a	Clier	stitute es hav	Total Number of Containers nature on this Chain of Custody form as acknowledgement that the above we been reqested, and the information and herein is correct and accurate.

Report date:

JONES ENVIRONMENTAL SAMPLING METHODOLOGY & LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School
Project Address: 18230 Kittridge Street

Reseda, CA

JEL Ref. No.: ST-12772 Client Ref. No.: 450810

10/8/2018

Date Sampled: 10/5/2018

Date Received: 10/6/2018 **Date Analyzed:** 10/7/2018

Physical State: Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS

Sampling – Soil Gas samples were collected 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 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe.

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.

Approval:

Angela Haar, Ph. D. Mobile Lab Manager Reseda, CA

JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Parsons	Report date:	10/8/2018
Client Address:	100 W. Walnut Street	Jones Ref. No.:	ST-12772
	Pasadena, CA 91124	Client Ref. No.:	450810
Attn:	Justin King	Date Sampled:	10/5/2018
		Date Received:	10/6/2018
Project:	Reseda High School	Date Analyzed:	10/7/2018
Project Address:	18230 Kittridge St.	Physical State:	Soil Gas

EPA 8260B - Volatile Organics by GC/MS

Sample ID:	AOC4-SS5	AOC4-SS12	AOC4-SS3	AOC4-SS3 REP	AOC4-SS7		
Jones ID:	ST-12772-01	ST-12772-02	ST-12772-03	ST-12772-04	ST-12772-05	Reporting Limit	<u>Units</u>
Analytes:							
Benzene	ND	ND	ND	ND	ND	3	μg/m3
Tetrachloroethene	4	89	323	373	234	3	μg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	30	$\mu g/m3$
n-Hexane	ND	ND	ND	ND	ND	30	$\mu g/m3$
n-Heptane	ND	ND	ND	ND	ND	30	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Limit	<u>s</u>
Dibromofluoromethane	89%	91%	91%	85%	88%	60 - 140	
Toluene-d ₈	91%	91%	91%	93%	94%	60 - 140	
4-Bromofluorobenzene	89%	91%	91%	89%	96%	60 - 140	
	D1-100718-	D1-100718-	D1-100718-	D1-100718-	D1-100718-		
	01	01	01	01	01		

ND= Value less than reporting limit

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

 Client:
 Parsons
 Report date:
 10/8/2018

 Client Address:
 100 W. Walnut Street
 Jones Ref. No.:
 ST-12772

 Pasadena, CA 91124
 Client Ref. No.:
 450810

 Attn:
 Justin King
 Date Sampled:
 10/5/2018

Attn: Justin King Date Sampled: 10/5/2018
Date Received: 10/6/2018

Project:Reseda High SchoolDate Analyzed:10/7/2018Project Address:18230 Kittridge St.Physical State:Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS

Sample ID:	METHOD BLANK	SAMPLING BLANK	
Jones ID:	100718- D1MB1	100718- D1SB1	Reporting Limit Units
Analytes:			
Benzene	ND	ND	$3 \mu g/m3$
Tetrachloroethene	ND	ND	$\frac{1}{2}$ $\frac{1}{\mu g/m^3}$
Tracer:			
n-Pentane	ND	ND	$30 \mu g/m3$
n-Hexane	ND	ND	$30 \mu g/m3$
n-Heptane	ND	ND	$30 \mu g/m3$
Dilution Factor	1	1	
Surrogate Recoveries:			QC Limits
Dibromofluoromethane	87%	77%	60 - 140
Toluene-d ₈	87%	98%	60 - 140
4-Bromofluorobenzene	92%	87%	60 - 140
	D1-100718-	D1-100718-	
	01	01	

ND= Value less than reporting limit

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 10/8/2018

100 W. Walnut Street Jones Ref. No.: ST-12772 **Client Address:**

Pasadena, CA 91124 Client Ref. No.: 450810

Justin King **Date Sampled:** 10/5/2018 Attn:

Date Received: 10/6/2018 Reseda High School **Date Analyzed:** 10/7/2018 **Project Address:**

18230 Kittridge St. **Physical State:** Soil Gas

Reseda, CA

Project:

EPA 8260B - Volatile Organics by GC/MS

Batch ID:	D1-1007	18-01				
Jones ID:	100718-D1LCS1	100718-D1LCSD1		10	0718-D1CC	V1
	LCS	LCSD		Acceptability		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)	<u>CCV</u>	Range (%)
Vinyl chloride	121%	130%	7.3%	60 - 140	122%	80 - 120
1,1-Dichloroethene	111%	114%	2.0%	60 - 140	116%	80 - 120
Cis-1,2-Dichloroethene	107%	107%	0.3%	70 - 130	106%	80 - 120
1,1,1-Trichloroethane	104%	107%	2.2%	70 - 130	104%	80 - 120
Benzene	118%	119%	0.6%	70 - 130	100%	80 - 120
Trichloroethene	103%	102%	0.7%	70 - 130	104%	80 - 120
Toluene	92%	94%	2.8%	70 - 130	96%	80 - 120
Tetrachloroethene	88%	93%	5.5%	70 - 130	91%	80 - 120
Chlorobenzene	75%	90%	17.1%	70 - 130	102%	80 - 120
Ethylbenzene	97%	99%	1.9%	70 - 130	102%	80 - 120
1,2,4 Trimethylbenzene	92%	99%	7.8%	70 - 130	102%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	92%	94%		60 - 140	99%	60 - 140
Toluene-d ₈	89%	94%		60 - 140	97%	60 - 140
4-Bromofluorobenzene	95%	93%		60 - 140	104%	60 - 140

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample Duplicate

CCV = Continuing Calibration Verification

RPD = Relative Percent Difference; Acceptability range for RPD is $\leq 20\%$



11007 Forest PI. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Soil-Gas Chain of Custody Record

Parsons Project Name Passeda Haw Project Address 18230 Kitta Resca, CA Email	Schi	e S				2002.200	Shut-In Test: N Flow Rate: If different than above, see Notes. Tracer: n-pentane n-hexane n-heptane Helium 1,1-DFA uested: Units: Residential				Air (A)			InH2O)		Jones Project # ST-12772 Page of Sample Condition as Recieved: Sealed pes no Sample Container: This is a seen of the seen	
JUSTIA KIN Sample ID	Purge Number	Purge Volume (mL)	Date Date	Pump Used	Magnehelic	□ Comm	Cannister ID	Cannister Start Pressure	Cannister End Pressure	Sampling Start Time	Sampling End Time	Sample Ma Soil Gas (SG	EPA 8260B	EPA TO-15	Magnehelic Vacuum	Number of Containers	Notes & Special Instructions
AAC9-555	1	125	10/5			57-12772-01	01187	-30	-5	1528	1536	1		X		1	
1ABC 4-5512	1	125	10/5			ST-12772-02	B2449	-31	-5	15/12	1549			X		1	
90C4-553	1	125	1015			ST-12772-03	B2932	-30	-5	1858	1601	86		X		1	
\$10C4-553 REP	1	125	1015			5712712-04	B2418	-29	-5	[888]	1001	80		x		1	
AOU4-557	1	125	10/2			57-12771-05	B421	-30	-5	1608	1617	જા		X		1	
Relinquished By (Signature) Company		Printed Nan	nking.	Time:		Received By (Signature)	Toile SENVIR	2000	Anr Date:		OTC	e:					Total Number of Containers
Relinquished By (Signature) Company Toyler Envisor	A	Printed Nan	ust.	OTO		Received By Laboratory	Signature) Envirs		Print	ovgla	8 For	sle			con	stitute:	ature on this Chain of Custody form s acknowledgement that the above /e been reqested, and the information d herein is correct and accurate.

Report date:

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School PEA
Project Address: 18230 Kittridge Street

Reseda, CA

JEL Ref. No.: ST-13160

Date Sampled: 1

1/3/2019 1/3/2019

1/7/2019

Date Analyzed: Physical State:

Date Received:

1/5/2019 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

714-449-9937 11007 562-646-1611 SANT 805-399-0060 WWV

11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

Soil Gas

JONES ENVIRONMENTAL LABORATORY RESULTS

Client:ParsonsReport date:1/7/2019Client Address:100 W. Walnut StreetJones Ref. No.:ST-13160

Pasadena, CA 91124

Attn: Justin King Date Sampled: 1/3/2019

Reseda High School PEA

Date Received: 1/3/2019

Date Analyzed: 1/5/2019

Project:Reseda High School PEADate Analyzed:Project Address:18230 Kittridge StreetPhysical State:

Reseda, CA

EPA TO-15 – Volatile Organics by GC/MS

Sample ID:	AOC4-SS12	AOC4-SS12 DUP	AOC4-SS5	AOC4-SS3	AOC4-SS7		
Jones ID:	ST-13160-01	ST-13160-02	ST-13160-03	ST-13160-04	ST-13160-05	Reporting Limit	<u>Units</u>
Analytes:							
Benzene	ND	ND	ND	ND	ND	1.0	$\mu g/m3$
Tetrachloroethene	79.6	85.2	42.6	245	122.0	1.0	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	10	$\mu g/m3$
n-Hexane	ND	ND	ND	ND	ND	10	$\mu g/m3$
n-Heptane	ND	ND	ND	ND	ND	10	μg/m3
Surrogate Recovery: 4-Bromofluorobenzene	100%	100%	101%	100%	101%	<u>OC Limit</u> 60 - 140	<u>s</u>
	TO1-010519- 01	TO1-010519- 01	TO1-010519- 01	TO1-010519- 01	TO1-010519- 01		

ND = Value below reporting lin

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 1/7/2019
Client Address: 100 W. Walnut Street Jones Ref. No.: ST-13160

Client Address: 100 W. Walnut Street Pasadena, CA 91124

......

Attn: Justin King Date Sampled: 1/3/2019

Project: Reseda High School PEA Date Received: 1/3/2019

Date Received: 1/3/2019

1/5/2019

Project Address: 18230 Kittridge Street Physical State: Soil Gas

Reseda, CA

METHOD

EPA TO-15 - Volatile Organics by GC/MS

Sample ID:	METHOD BLANK						
Jones ID:	010519- TO1MB1					Reporting Limit	<u>Units</u>
Analytes:							
Benzene	ND					1.0	$\mu g/m3$
Tetrachloroethene	ND					1.0	μg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	10	$\mu g/m3$
n-Hexane	ND	ND	ND	ND	ND	10	$\mu g/m3$
n-Heptane	ND	ND	ND	ND	ND	10	$\mu g/m3$

Dilution Factor 1

Surrogate Recovery:QC Limits4-Bromofluorobenzene102%60 - 140

TO1-0105919-01

ND = Value below reporting lin

714-449-9937 562-646-1611 805-399-0060 11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons

Client Address:

100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School PEA
Project Address: 18230 Kittridge Street

Reseda, CA

Jones Ref. No.: ST-13160

Report date:

Date Sampled: 1/3/2019

1/7/2019

Date Received: 1/3/2019 **Date Analyzed:** 1/5/2019

Physical State: Soil Gas

EPA TO-15 - Volatile Organics by GC/MS

Sample Spiked:	HUMIDIFIED 1	NITROGEN	GC#:	TO1-010519-01
Jones ID:	010519-TO1CCV1	010519-TO1CCVD1		
<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Vinyl Chloride	109%	104%	4.7%	70-130
1,1-Dichloroethylene	106%	108%	1.9%	70-130
Cis-1,2-Dichloroethene	110%	111%	0.9%	70-130
1,1,1-Trichloroethane	94%	99%	5.2%	70-130
Benzene	106%	108%	1.9%	70-130
Trichloroethylene	103%	98%	5.0%	70-130
Toluene	108%	108%	0.0%	70-130
Tetrachloroethene	86%	91%	5.6%	70-130
Chlorobenzene	101%	104%	2.9%	70-130
Ethylbenzene	110%	112%	1.8%	70-130
1,2,4 Trimethylbenzene	97%	100%	3.0%	70-130
Surrogate Recovery:				
4-Bromofluorobenzene	104%	101%		60 - 140

MS = Matrix Spike

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



11007 Forest Pl. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Air Chain-of-Custody Record

Project Name Pescala High School PFA Project Address 18230 Kithridge Street Pescala, CA Email Phone Report To Sampler TUSTN King And				Turn Arour Immed Rush: 24hr	Purge Rate: Shut In Test: Y / Turn Around Requested: Tracer: P Immediate Attention n-pentane Rush:				cc/min / N Purge Num1 P\3 P\7 P\10 P	Page	05	1	sted	
Sample ID	Date Collected	Purge Number	Purge Volume	Laboratory Sample ID	Canister ID	Canister Start	Canister End	Flow Rate (cc/min)	Sampling Start Time	Sampling End Time		8260B	Aagnehelic F	Number of Containers
	1-3-19	3	128	ST-13160-01	B2450	Vacuum	Vacuum -5	200	1512	1520		80	2	1
AOC4-5512 DUP	1-3-19	3	125	ST-13160 CR	B2447	-30	-5	200	1512	1519	Y		(A. IV	1
HOC4-555	1-3-19	3	125	57-13160-03	B2460	-30	-4	200	1543	1540	1 ×			1
POC4-553	1-3-19	3	125	57-13160-04	B2444	-29	-5	200	1525	1530	Y			1
POC4-557	1-3-19	3	125	ST-1316005	B2440	-29	-5	200	1503	1509	K			1
														7
Relinquished By (Signature):			Date: /-3~/9	Recieved By (Signa	iture):			Date: 1-3-	19					
Company Parsos Relinquished By (Signature):			Time: /600 Date:	Company Recieved By Labor Company	L			Time:	0a	CO	The delive gnature on the enstitutes au analyses speciallyses and Terms an	his Chair thorization	of Custon to per above un	ody form form the nder the



714-449-9937 562-646-1611 805-399-0060 11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 1/8/2019

Client Address: 100 W. Walnut St. JEL Ref. No.: ST-13161

Pasadena, CA 91124

Attn: Justin King Date Sampled: 1/3/2019

Project: Reseda High School PEA Date Analyzed: 1/4/2019
Project Address: 18230 Kittridge Street Physical State: Indoor Air

Reseda, CA

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 (CCV) and Instrument Blanks (MB) were analyzed every 24 hours as prescribed by the method. In addition, a Continuing Calibration Verification Duplicate (CCVD) was analyzed with each batch of Indoor Air samples.

Approval:

Angela Haar, Ph. D. Mobile Lab Manager

714-449-9937 11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 562-646-1611 805-399-0060 WWW.JONESENV.COM

1/8/2019

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: Jones Ref. No.: ST-13161

Client Address: 100 W. Walnut St.

Pasadena, CA 91124

Attn: Justin King **Date Sampled:** 1/3/2019

Date Received: 1/3/2019 Reseda High School PEA **Project: Date Analyzed:** 1/4/2019 18230 Kittridge Street Physical State: Indoor Air **Project Address:**

Reseda, CA

EPA TO-15 - Volatile Organics by GC/MS

Sample ID:	IAS-2	IAS-3 DUP	OAS-1	IAS-3	UT-2		
Jones ID:	ST-13161-01	ST-13161-02	ST-13161-03	ST-13161-04	ST-13161-05	Reporting Limit	<u>Units</u>
Analytes: Benzene Tetrachloroethene	1.97 0.19	1.84 0.20	1.85 ND	1.95 0.20	2.04 0.11	0.10 0.10	μg/m3 μg/m3
Dilution Factor	1	1	1	1	1	0.10	µд/1113
Surrogate Recovery:	000/	1010/	1000/	1000/	1020/	QC Limit	<u>s</u>
4-Bromofluorobenzene	99%	101%	100%	100%	102%	60 - 140	
	01	TO1-010419- 01	01	01	01		

ND = Value below reporting limit

714-449-9937 562-646-1611 805-399-0060 11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address:

100 W. Walnut St.

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School PEA
Project Address: 18230 Kittridge Street

Reseda, CA

Jones Ref. No.: ST-13161

Report date:

1/8/2019

Date Sampled: 1/3/2019 **Date Received:** 1/3/2019

Date Analyzed: 1/4/2019

Physical State: Indoor Air

EPA TO-15 - Volatile Organics by GC/MS

Sample ID:	UT-1	OAS-3	OAS-2	IAS-1	IAS-4		
Jones ID:	ST-13161-06	ST-13161-07	ST-13161-08	ST-13161-09	ST-13161-10	Reporting Limit	<u>Units</u>
Analytes:							
Benzene	2.20	1.56	1.59	2.33	1.34	0.10	$\mu g/m3$
Tetrachloroethene	0.12	ND	ND	0.13	ND	0.10	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Surrogate Recovery: 4-Bromofluorobenzene	99%	100%	100%	100%	99%	<u>QC Limit</u> 60 - 140	_
	TO1-010419-	TO1-010419-	TO1-010419-	TO1-010419-	TO1-010419-		
	01	01	01	01	01		

ND = Value below reporting limit

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Report date: 1/8/2019

Client Address:

100 W. Walnut St.

Jones Ref. No.: ST-13161

Pasadena, CA 91124

Attn:

Justin King

Date Sampled: 1/3/2019 **Date Received:** 1/3/2019

Project:
Project Address:

Reseda High School PEA 18230 Kittridge Street

Date Analyzed: 1/4/2019 **Physical State:** Indoor Air

Reseda, CA

EPA TO-15 - Volatile Organics by GC/MS

Sample ID:

METHOD BLANK

.

Jones ID:

010419-TO1MB1

Reporting Limit Units

Analytes:

Benzene ND Tetrachloroethene ND $\begin{array}{cc} 0.10 & \quad \mu g/m3 \\ 0.10 & \quad \mu g/m3 \end{array}$

Dilution Factor

1

<u>Surrogate Recovery:</u> 4-Bromofluorobenzene

QC Limits

60 - 140

TO1-010419-

104%

01

ND = Value below reporting limit

714-449-9937 1100 562-646-1611 SAN 805-399-0060 WW

11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons

Client Address: 100 W. Walnut St.

Pasadena, CA 91124

Attn: Justin King

Project: Reseda High School PEA
Project Address: 18230 Kittridge Street

Reseda, CA

Report date: Jones Ref. No.: 1/8/2019 ST-13161

Date Sampled: 1/3/2019 **Date Received:** 1/3/2019

Date Analyzed: 1/4/2019 **Physical State:** Indoor Air

EPA TO-15 - Volatile Organics by GC/MS

Sample Spiked: HUMIDIFIED NITROGEN GC#: TO1-010419-01

Jones ID: 010419-T01CCV1 010419-T01CCVD1

<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Vinyl Chloride	118%	117%	0.9%	70-130
1,1-Dichloroethylene	115%	109%	5.4%	70-130
Cis-1,2-Dichloroethene	120%	118%	1.7%	70-130
1,1,1-Trichloroethane	105%	106%	0.9%	70-130
Benzene	116%	119%	2.6%	70-130
Trichloroethylene	112%	111%	0.9%	70-130
Toluene	115%	116%	0.9%	70-130
Tetrachloroethene	93%	95%	2.1%	70-130
Chlorobenzene	113%	109%	3.6%	70-130
Ethylbenzene	119%	119%	0.0%	70-130
1,2,4 Trimethylbenzene	109%	111%	1.8%	70-130
Surrogate Recovery:	1010/	1000/		(0. 140
4-Bromofluorobenzene	101%	100%		60 - 140

MS = Matrix Spike

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



11007 Forest Pl. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Air Chain-of-Custody Record

Client				Į0	ate							Jones	Proj	ect#	
Parsons					1-3-L	9	Р	urge Rate:	31.	cc/mir	n	55	7-13	316	1
Project Name Project Address Project Address	school	PFA			Hent Project #		SI	hut In Test:	Y	/ N		Page			
					1188							1	Ko I	1	
18230 Kitar		RET			Turn Around Requested:			cer:		nber:	Analysis Reques				
Resida, C	A				Immed	diate Attention	_	-pentane		□ 1 PV			sis R		ted
					Rush:	П		elium		☐ 3 PV				(H 2O)	
Phone						48hr				☐ 10 P			- 11	ng (in	ers
Report To TWATIN KIND	Sampler Av	10	Fac		Normal									lic Readil	of Contain
Sample ID	Date Collected	Purge Number	Purge Volume	Laborato	ry Sample ID	Canister ID	Canister Start Vacuum	Canister End Vacuum	Flow Rate (cc/min)	Sampling Start Time	Sampling End Time		8260B	Magnehelic Reading (in/H	Number of Containers
IAS-2	1-3-19		10.39	ST-131	161-01	61197	-30	-3		OTIS	415	X	100	1	1
FAS-3 DUP	1-3-19			ST-131	61-02	1596	-29	-3	NP 2	0714	1445	X		8	1
OAS-1	1-3-19			ST-13	161-03	01164	-27	-3		010	1310	X			1
IAS-3	1-3-19			ST-13	161-64	82676	-30	-4	2.5%	014	1448	Y			1
UT-2	1-3-19	1		ST-13	161-05	82471	-30	-3		0700	1431	X			1
UT-1	1-3-19			ST-13	161-06	B2658	-30	-2	1	0705	1455	X			1
OAS-3	1-3-19			ST-13	161-07	B2465	-31	-5	3-5	0713	1515	Y		100)
CAS-2	1-3-19			5T-13	161-08	B2426	-30	-5		जा।	ISUY	Y			1
IAS-1	1-3-19	112		55-131	61-0a	82473	-30	-3		ा।	1510	Y			1
F185-4	1-3-19			ST-131	61-10	B2474	-29	-5		0800	1600	XC			1
Relinquished By (Signature):			Date: 1-3-19	F	Recieved By (Signa	er Tour			Date:	19		The delive	ry of san	nples and	the
Company Parsons			1600		Company / TRecieved By Labor	EL (Signatura):			2000			The delivery of samples and the signature on this Chain of Custody form constitutes authorization to perform the			
Relinquished By (Signature):			Date:			atory (Signature):	analyses specificied above u Terms and Conditions set								
Company			Time:		Company				Time.						

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 West Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School PEA

Project Address: 18230 Kittridge Street

Reseda, CA

Report date: 9/15/2018 **JEL Ref. No.:** D-1525

Client Ref. No.: 450810

Date Sampled: 9/15/2018

Date Received: 9/15/2018 **Date Analyzed:** 9/15/2018

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

JONES ENVIRONMENTAL LABORATORY RESULTS

Parsons Report date: 9/15/2018 **Client:**

> 100 West Walnut Street Jones Ref. No.: D-1525 Pasadena, CA 91124 **Client Ref. No.:** 450810

Justin King **Date Sampled:** 9/15/2018 Attn:

> **Date Received:** 9/15/2018

Project: Reseda High School PEA Date Analyzed: 9/15/2018 **Project Address:** 18230 Kittridge Street **Physical State:** Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

AOC4-SV1- AOC4-SV1- AOC4-SV2- AOC4-SV2-Sample ID: 15' 15' REP 5' 15'

Jones ID:	D-1525-01	D-1525-02	D-1525-03	D-1525-04	D-1525-05	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:						<u> (p.C.) mo j</u>	(HE/IIIC)
Benzene	ND	ND	ND	ND	ND	8	2
Bromobenzene	ND	ND	ND	ND	ND	8	6
Bromodichloromethane	5 J	ND	5 J	4 J	ND	8	1
Bromoform	ND	ND	ND	ND	ND	8	3
n-Butylbenzene	ND	ND	ND	ND	ND	8	8
sec-Butylbenzene	ND	ND	ND	ND	ND	8	8
tert-Butylbenzene	ND	ND	ND	ND	ND	8	5
Carbon tetrachloride	ND	ND	ND	ND	ND	8	5
Chlorobenzene	ND	ND	ND	ND	ND	8	5
Chloroform	ND	ND	ND	ND	ND	8	2
2-Chlorotoluene	ND	ND	ND	ND	ND	10	7
4-Chlorotoluene	ND	ND	ND	ND	ND	10	10
Dibromochloromethane	ND	ND	ND	ND	ND	8	2
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	2
Dibromomethane	ND	ND	ND	ND	ND	8	3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	10	5
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	10	10
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	10	10
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	8
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	4
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	2
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	4
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	2
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	2
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	2
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	9

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates AOC4-SV1- AOC4-SV1- AOC4-SV2- AOC4-SV2-Sample ID: 5' 15' 15' REP 5' 15' **Jones ID:** D-1525-01 D-1525-02 D-1525-03 D-1525-04 D-1525-05 Reporting Limit **MDL** $(\mu g/m3)$ $(\mu g/m3)$ **Analytes:** ND ND ND ND ND 8 2 cis-1,3-Dichloropropene trans-1,3-Dichloropropene ND ND ND ND ND 8 2 Ethylbenzene ND ND ND ND ND 8 6 Freon 113 16 ND ND ND ND ND 6 Hexachlorobutadiene ND ND ND ND ND 16 10 Isopropylbenzene ND ND ND ND ND 8 7 ND 10 10 4-Isopropyltoluene ND ND ND ND Methylene chloride 8 ND ND ND ND ND 7 Naphthalene ND ND ND ND ND 40 8 8 n-Propylbenzene ND ND ND ND ND 12 Styrene ND ND ND ND ND 8 4 ND ND ND ND ND 8 2 1,1,1,2-Tetrachloroethane 8 1,1,2,2-Tetrachloroethane ND ND ND ND ND 5 Tetrachloroethene 289 292 302 311 151 8 8 8 ND ND ND 4 Toluene 4J ND 1.2.3-Trichlorobenzene ND ND ND ND ND 16 12 1,2,4-Trichlorobenzene ND ND ND ND ND 16 13 1,1,1-Trichloroethane ND ND ND ND ND 8 3 1,1,2-Trichloroethane ND ND ND 8 3 ND ND Trichloroethene ND ND ND ND ND 8 6 Trichlorofluoromethane 10 10 ND ND ND ND ND 1.2.3-Trichloropropane ND ND ND ND ND 8 4 ND 1,2,4-Trimethylbenzene ND ND ND ND 8 7 7 8 1,3,5-Trimethylbenzene ND ND ND ND ND Vinyl chloride ND ND ND ND ND 8 4 13 16 m,p-Xylene ND ND ND ND ND o-Xylene ND ND ND ND ND 8 5 5 **MTBE** ND ND ND ND ND 40 2 Ethyl-tert-butylether ND ND ND ND ND 40 40 2 Di-isopropylether ND 40 2 tert-amylmethylether tert-Butylalcohol ND ND ND ND ND 400 10 Tracer: n-Pentane ND ND ND ND ND 400 ND ND ND ND ND 400 n-Hexane n-Heptane ND ND ND ND ND 400 **Dilution Factor** 1 1 1 1 1

 Batch ID
 D-091518 D-091518 D-091518 D-091518 D-091518 D-091518

 01
 01
 01
 01
 01
 01

96%

93%

94%

96%

94%

95%

ND= Value less than reporting limit

Surrogate Recoveries:

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-d₈

J = Value less than reporting limit but above MDL

97%

95%

93%

94%

94%

96%

94%

93%

92%

OC Limits

60 - 140

60 - 140

60 - 140

JONES ENVIRONMENTAL LABORATORY RESULTS

Parsons Report date: 9/15/2018 **Client:**

> 100 West Walnut Street Jones Ref. No.: D-1525 Pasadena, CA 91124 **Client Ref. No.:** 450810

Justin King **Date Sampled:** 9/15/2018 Attn:

> **Date Received:** 9/15/2018

Project: Reseda High School PEA **Date Analyzed:** 9/15/2018 **Project Address:** 18230 Kittridge Street **Physical State:** Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

AOC4-SV3- AOC4-SV6- AOC4-SV6- AOC4-SV8-Sample ID: 15' 15'

Jones ID:	D-1525-06	D-1525-07	D-1525-08	D-1525-09	D-1525-10	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:						<u> (p.C., m.c.)</u>	(ME) IIIO)
Benzene	ND	ND	ND	ND	ND	8	2
Bromobenzene	ND	ND	ND	ND	ND	8	6
Bromodichloromethane	4 J	5 J	ND	ND	5 J	8	1
Bromoform	ND	ND	ND	ND	ND	8	3
n-Butylbenzene	ND	ND	ND	ND	30	8	8
sec-Butylbenzene	ND	ND	ND	ND	ND	8	8
tert-Butylbenzene	ND	ND	ND	ND	ND	8	5
Carbon tetrachloride	ND	ND	ND	ND	ND	8	5
Chlorobenzene	ND	ND	ND	ND	ND	8	5
Chloroform	ND	ND	ND	ND	ND	8	2
2-Chlorotoluene	ND	ND	ND	ND	ND	10	7
4-Chlorotoluene	ND	ND	ND	ND	ND	10	10
Dibromochloromethane	ND	ND	ND	ND	ND	8	2
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	2
Dibromomethane	ND	ND	ND	ND	ND	8	3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	10	5
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	10	10
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	10	10
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	8
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	4
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	2
1,1-Dichloroethene	6 J	6 J	ND	6 J	ND	8	4
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	2
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	2
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	2
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	9

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Comple ID:	AOC4-SV3-	AOC4-SV3-	AOC4-SV6-	AOC4-SV6-	AOC4-SV8-
Sample ID:	5'	15'	5'	15'	5'

Jones ID:	D-1525-06	D-1525-07	D-1525-08	D-1525-09	D-1525-10	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:						<u>(µg/ms)</u>	<u>(μg/III3)</u>
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	2
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	2
Ethylbenzene	ND	ND	ND	ND	35	8	6
Freon 113	ND	ND	ND	ND	ND	16	6
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	10
Isopropylbenzene	ND	ND	ND	ND	ND	8	7
4-Isopropyltoluene	ND	ND	ND	ND	ND	10	10
Methylene chloride	ND	ND	ND	ND	ND	8	7
Naphthalene	ND	ND	ND	15J	199	40	8
n-Propylbenzene	ND	ND	ND	ND	34	8	12
Styrene	ND	ND	ND	ND	ND	8	4
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	2
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	5
Tetrachloroethene	728	491	196	174	494	8	8
Toluene	ND	ND	ND	ND	29	8	4
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	12
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	13
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	3
Trichloroethene	ND	ND	ND	ND	ND	8	6
Trichlorofluoromethane	ND	ND	ND	ND	ND	10	10
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	4
1,2,4-Trimethylbenzene	ND	ND	8 J	ND	378	8	7
1,3,5-Trimethylbenzene	ND	ND	ND	ND	87	8	7
Vinyl chloride	ND	ND	ND	ND	ND	8	4
m,p-Xylene	ND	ND	ND	ND	217	16	13
o-Xylene	ND	ND	ND	ND	132	8	5
MTBE	ND	ND	ND	ND	ND	40	5
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	2
Di-isopropylether	ND	ND	ND	ND	ND	40	2
tert-amylmethylether	ND	ND	ND	ND	ND	40	2
tert-Butylalcohol	ND	ND	ND	ND	ND	400	10
Tracer: n-Pentane	ND	ND	ND	ND	ND	400	
	ND ND	ND ND	ND ND	ND ND	ND ND	400	
n-Hexane	ND ND	ND ND	ND ND	ND ND	ND ND	400	
n-Heptane <u>Dilution Factor</u>	ND 1	ND 1	ND 1	ND 1	ND 1	400	
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Lim	
Dibromofluoromethane	100%	99%	95%	98%	97%	60 - 140	
Toluene-d ₈	92%	88%	92%	93%	93%	60 - 140)
4-Bromofluorobenzene	91%	89%	94%	93%	92%	60 - 140)
Batch ID	D-091518- 01	D-091518- 01	D-091518- 01	D-091518- 01	D-091518- 01		

ND= Value less than reporting limit

J = Value less than reporting limit but above MDL

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 9/15/2018

100 West Walnut Street Jones Ref. No.: D-1525 Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/15/2018

Date Received: 9/15/2018

Project:Reseda High School PEADate Analyzed:9/15/2018Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: AOC4-SV8- AOC4-SS9 AOC4-SS10 AOC4-SS11

Jones ID:	D-1525-11	D-1525-12	D-1525-13	D-1525-14	D-1525-15	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:						<u> (p.C., m.c.)</u>	(ME) IIIO)
Benzene	7 J	ND	ND	ND	ND	8	2
Bromobenzene	ND	ND	ND	ND	ND	8	6
Bromodichloromethane	ND	4 J	5 J	5 J	5 J	8	1
Bromoform	ND	ND	ND	ND	ND	8	3
n-Butylbenzene	243	ND	ND	ND	ND	8	8
sec-Butylbenzene	24	ND	ND	ND	ND	8	8
tert-Butylbenzene	ND	ND	ND	ND	ND	8	5
Carbon tetrachloride	ND	ND	ND	ND	ND	8	5
Chlorobenzene	ND	ND	ND	ND	ND	8	5
Chloroform	ND	ND	ND	ND	ND	8	2
2-Chlorotoluene	ND	ND	ND	ND	ND	10	7
4-Chlorotoluene	ND	ND	ND	ND	ND	10	10
Dibromochloromethane	ND	ND	ND	ND	4 J	8	2
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	2
Dibromomethane	ND	ND	ND	ND	ND	8	3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	10	5
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	10	10
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	10	10
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	8
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	4
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	2
1,1-Dichloroethene	6 J	ND	ND	ND	ND	8	4
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	2
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	2
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	2
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	9

JONES ENVIRONMENTAL LABORATORY RESULTS

	EPA 82	60B – Volati	le Organics l	by GC/MS +	Oxygenates		
Sample ID:	AOC4-SV8- 15'	AOC4-SS8	AOC4-SS9	AOC4-SS10	AOC4-SS11		
Jones ID:	D-1525-11	D-1525-12	D-1525-13	D-1525-14	D-1525-15	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	2
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	2
Ethylbenzene	410	ND	ND	ND	ND	8	6
Freon 113	ND	ND	ND	ND	ND	16	6
Hexachlorobutadiene	ND	ND	ND	ND	ND	16	10
Isopropylbenzene	35	ND	ND	ND	ND	8	7
4-Isopropyltoluene	39	ND	ND	ND	ND	10	10
Methylene chloride	ND	ND	ND	ND	ND	8	7
Naphthalene	774	ND	ND	ND	ND	40	8
n-Propylbenzene	282	ND	ND	ND	ND	8	12
Styrene	ND	ND	ND	ND	ND	8	4
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	2
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	5
Tetrachloroethene	458	566	438	18	73	8	8
Toluene	507	ND	ND	ND	ND	8	4
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	12
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	13
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	3
Trichloroethene	ND	ND	ND	ND	ND	8	6
Trichlorofluoromethane	ND	ND	ND	ND	ND	10	10
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	4
1,2,4-Trimethylbenzene	2440	ND	ND	ND	ND	8	7
1,3,5-Trimethylbenzene	663	ND	ND	ND	ND	8	7
Vinyl chloride	ND	ND	ND	ND	ND	8	4
m,p-Xylene	2030	ND	ND	ND	ND	16	13
o-Xylene	1065	ND	ND	ND	ND	8	5
MTBE	ND	ND	ND	ND	ND	40	5
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	2 2
Di-isopropylether	ND	ND	ND	ND	ND	40	
tert-amylmethylether	ND	ND	ND	ND	ND	40	2
tert-Butylalcohol	ND	ND	ND	ND	ND	400	10
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	400	
n-Hexane	ND	ND	ND	ND	ND	400	
n-Heptane	ND	ND	ND	ND	ND	400	
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Limi	
Dibromofluoromethane	99%	97%	99%	96%	94%	60 - 140	
Toluene-d ₈	95%	@	91%	92%	94%	60 - 140	
4-Bromofluorobenzene	96%	91%	91%	91%	95%	60 - 140)
Batch ID	D-091518-	D-091518-	D-091518-	D-091518-	D-091518-		
Duttil ID	01	01	01	01	01		

ND= Value less than reporting limit

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 9/15/2018

100 West Walnut Street Jones Ref. No.: D-1525 Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/15/2018

Date Received: 9/15/2018

Project:Reseda High School PEADate Analyzed:9/15/2018Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Sample ID: AOC4-SS12 AOC4-SV15- AOC4-SV15- AOC4-SV15- 5' 5' REP 15'

Jones ID:	D-1525-16	D-1525-17	D-1525-18	D-1525-19	<u>Reporting Limit</u> (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:						
Benzene	ND	ND	ND	ND	8	2
Bromobenzene	ND	ND	ND	ND	8	6
Bromodichloromethane	5J	5J	5J	6 J	8	1
Bromoform	ND	ND	ND	ND	8	3
n-Butylbenzene	ND	ND	ND	ND	8	8
sec-Butylbenzene	ND	ND	ND	ND	8	8
tert-Butylbenzene	ND	ND	ND	ND	8	5
Carbon tetrachloride	ND	ND	ND	ND	8	5
Chlorobenzene	ND	ND	ND	ND	8	5
Chloroform	ND	ND	ND	ND	8	2
2-Chlorotoluene	ND	ND	ND	ND	10	7
4-Chlorotoluene	ND	ND	ND	ND	10	10
Dibromochloromethane	ND	ND	ND	ND	8	2
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	8	2
Dibromomethane	ND	ND	ND	ND	8	3
1,2- Dichlorobenzene	ND	ND	ND	ND	10	5
1,3-Dichlorobenzene	ND	ND	ND	ND	10	10
1,4-Dichlorobenzene	ND	ND	ND	ND	10	10
Dichlorodifluoromethane	ND	ND	ND	ND	8	8
1,1-Dichloroethane	ND	ND	ND	ND	8	4
1,2-Dichloroethane	ND	ND	ND	ND	8	2
1,1-Dichloroethene	7 J	5 J	8 J	ND	8	4
cis-1,2-Dichloroethene	ND	ND	ND	ND	8	2
trans-1,2-Dichloroethene	ND	ND	ND	ND	8	5
1,2-Dichloropropane	ND	ND	ND	ND	8	2
1,3-Dichloropropane	ND	ND	ND	ND	8	2
2,2-Dichloropropane	ND	ND	ND	ND	8	3
1,1-Dichloropropene	ND	ND	ND	ND	10	9

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SS12	AOC4-SV15- 5'	AOC4-SV15- 5' REP	AOC4-SV15- 15'		
Jones ID:	D-1525-16	D-1525-17	D-1525-18	D-1525-19	Reporting Limit	MDL_
Analytes:					$(\mu g/m3)$	$(\mu g/m3)$
cis-1,3-Dichloropropene	ND	ND	ND	ND	8	2
trans-1,3-Dichloropropene	ND	ND	ND	ND	8	2
Ethylbenzene	ND	ND	ND	ND	8	6
Freon 113	ND	ND	ND	ND	16	6
Hexachlorobutadiene	ND	ND	ND	ND	16	10
Isopropylbenzene	ND	ND	ND	ND	8	7
4-Isopropyltoluene	ND	ND	ND	14	10	10
Methylene chloride	ND	ND	ND	ND	8	7
Naphthalene	ND	ND	ND	ND	40	8
n-Propylbenzene	ND	ND	ND	ND	8	12
Styrene	ND	ND	ND	ND	8	4
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	8	2
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	8	5
Tetrachloroethene	109	683	676	463	8	8
Toluene	ND	ND	ND	ND	8	4
1,2,3-Trichlorobenzene	ND	ND	ND	ND	16	12
1,2,4-Trichlorobenzene	ND	ND	ND	ND	16	13
1,1,1-Trichloroethane	ND	ND	ND	ND	8	3
1,1,2-Trichloroethane	ND	ND	ND	ND	8	3
Trichloroethene	ND	ND	ND	ND	8	6
Trichlorofluoromethane	ND	ND	ND	ND	10	10
1,2,3-Trichloropropane	ND	ND	ND	ND ND	8	4
1,2,4-Trimethylbenzene	ND	ND	ND	ND ND	8	7
1,3,5-Trimethylbenzene	ND	ND	ND	ND	8	7
Vinyl chloride	ND ND	ND	ND	ND	8	4
m,p-Xylene	ND ND	ND	ND	ND	16	13
o-Xylene	ND	ND	ND	ND ND	8	5
MTBE	ND ND	ND	ND	ND	40	5
Ethyl-tert-butylether	ND	ND	ND	ND ND	40	2
Di-isopropylether	ND ND	ND ND	ND ND	ND ND	40	
tert-amylmethylether	ND	ND	ND	ND	40	2 2
tert-Butylalcohol	ND ND	ND ND	ND ND	ND ND	400	10
tert-Butylaicolloi	ND	ND	ND	ND	400	10
Tracer:						
n-Pentane	ND	ND	ND	ND	400	
n-Hexane	ND	ND	ND	ND	400	
n-Heptane	ND	ND	ND	ND	400	
Dilution Factor	1	1	1	1		
Surrogate Recoveries:					QC Limi	ts
Dibromofluoromethane	93%	101%	97%	99%	60 - 140	
Toluene-d ₈	96%	91%	94%	94%	60 - 140	
4-Bromofluorobenzene	94%	92%	94%	93%	60 - 140	
Batch ID	D-091518-	D-091518-	D-091518-	D-091518-		

ND= Value less than reporting limit

Batch ID

01

01

01

01

J = Value less than reporting limit but above MDL

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Parsons Report date: 9/15/2018 **Client:**

> 100 West Walnut Street Jones Ref. No.: D-1525 Pasadena, CA 91124 **Client Ref. No.:** 450810

Justin King **Date Sampled:** 9/15/2018 Attn:

> 9/15/2018 **Date Received:**

Project: Reseda High School PEA **Date Analyzed:** 9/15/2018 **Project Address:** Soil Gas

18230 Kittridge Street **Physical State:**

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Sample ID:	METHOD BLANK	SAMPLING BLANK		
Jones ID:	091518- D1MB1	091518- D1SB1	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:				
Benzene	ND	ND	8	2
Bromobenzene	ND	ND	8	6
Bromodichloromethane	ND	ND	8	1
Bromoform	ND	ND	8	3
n-Butylbenzene	ND	ND	8	8
sec-Butylbenzene	ND	ND	8	8
tert-Butylbenzene	ND	ND	8	5
Carbon tetrachloride	ND	ND	8	5
Chlorobenzene	ND	ND	8	5
Chloroform	ND	ND	8	2
2-Chlorotoluene	ND	ND	10	7
4-Chlorotoluene	ND	ND	10	10
Dibromochloromethane	ND	ND	8	2
1,2-Dibromo-3-chloropropane	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	8	2
Dibromomethane	ND	ND	8	3
1,2- Dichlorobenzene	ND	ND	10	5
1,3-Dichlorobenzene	ND	ND	10	10
1,4-Dichlorobenzene	ND	ND	10	10
Dichlorodifluoromethane	ND	ND	8	8
1,1-Dichloroethane	ND	ND	8	4
1,2-Dichloroethane	ND	ND	8	2
1,1-Dichloroethene	ND	ND	8	4
cis-1,2-Dichloroethene	ND	ND	8	2
trans-1,2-Dichloroethene	ND	ND	8	5
1,2-Dichloropropane	ND	ND	8	2
1,3-Dichloropropane	ND	ND	8	2
2,2-Dichloropropane	ND	ND	8	3
1,1-Dichloropropene	ND	ND	10	9

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B -	Volatile	Organics	by GC/MS	+ Oxygenates

Sample ID:	METHOD BLANK	SAMPLING BLANK		
Jones ID:	091518- D1MB1	091518- D1SB1	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:			(<u>µg/m3)</u>	<u>(με/πισ)</u>
cis-1,3-Dichloropropene	ND	ND	8	2
trans-1,3-Dichloropropene	ND	ND	8	2
Ethylbenzene	ND	ND	8	6
Freon 113	ND	ND	16	6
Hexachlorobutadiene	ND	ND	16	10
Isopropylbenzene	ND	ND	8	7
4-Isopropyltoluene	ND	ND	10	10
Methylene chloride	ND	ND	8	7
Naphthalene	ND	ND	40	8
n-Propylbenzene	ND	ND	8	12
Styrene	ND	ND	8	4
1,1,1,2-Tetrachloroethane	ND	ND	8	2
1,1,2,2-Tetrachloroethane	ND	ND	8	5
Tetrachloroethene	ND	ND	8	8
Toluene	ND	ND	8	4
1,2,3-Trichlorobenzene	ND	ND	16	12
1,2,4-Trichlorobenzene	ND	ND	16	13
1,1,1-Trichloroethane	ND	ND	8	3
1,1,2-Trichloroethane	ND	ND	8	3
Trichloroethene	ND	ND	8	6
Trichlorofluoromethane	ND	ND	10	10
1,2,3-Trichloropropane	ND	ND	8	4
1,2,4-Trimethylbenzene	ND	ND	8	7
1,3,5-Trimethylbenzene	ND	ND	8	7
Vinyl chloride	ND	ND	8	4
m,p-Xylene	ND	ND	16	13
o-Xylene	ND	ND	8	5
MTBE	ND	ND	40	5
Ethyl-tert-butylether	ND	ND	40	2
Di-isopropylether	ND	ND	40	2
tert-amylmethylether	ND	ND	40	2
tert-Butylalcohol	ND	ND	400	10
Tracer:	3.775) III o	400	
n-Pentane	ND	ND	400	
n-Hexane	ND	ND	400	
n-Heptane	ND	ND	400	
Dilution Factor	1	1		
Surrogate Recoveries:			OC Limits	
Dibromofluoromethane	88%	90%	60 - 140	
Toluene-d ₈	92%	92%	60 - 140	
4-Bromofluorobenzene	92%	95%	60 - 140	
Batch ID	D-091518-	D-091518-		
	01	01		

ND= Value less than reporting limit

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 9/15/2018

100 West Walnut Street Jones Ref. No.: D-1525
Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/15/2018

Date Received: 9/15/2018 **Date Analyzed:** 9/15/2018

Project:Reseda High School PEADate Analyzed:9/15/2018Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Batch ID: D-091518-01

Jones ID:	091518-D1LCS1	091518-D1LCSD1			091518	3-D1CCV1
	LCS	LCSD		Acceptability		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)	<u>CCV</u>	Range (%)
Vinyl chloride	88%	84%	4.5%	60 - 140	114%	80 - 120
1,1-Dichloroethene	93%	92%	1.2%	60 - 140	81%	80 - 120
Cis-1,2-Dichloroethene	112%	105%	6.7%	70 - 130	99%	80 - 120
1,1,1-Trichloroethane	108%	102%	6.1%	70 - 130	95%	80 - 120
Benzene	119%	114%	4.6%	70 - 130	92%	80 - 120
Trichloroethene	109%	102%	6.6%	70 - 130	100%	80 - 120
Toluene	101%	97%	3.2%	70 - 130	92%	80 - 120
Tetrachloroethene	95%	92%	2.9%	70 - 130	94%	80 - 120
Chlorobenzene	103%	101%	1.9%	70 - 130	97%	80 - 120
Ethylbenzene	104%	100%	4.0%	70 - 130	96%	80 - 120
1,2,4 Trimethylbenzene	103%	99%	3.6%	70 - 130	96%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	99%	96%		60 - 140	95%	60 - 140
Toluene-d ₈	95%	94%		60 - 140	93%	60 - 140
4-Bromofluorobenzene	101%	98%		60 - 140	103%	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%



11007 Forest Pl. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Soil-Gas Chain-of-Custody Record

PARSONS						Date 9/15/20	18	_ □ 1P	urge Numbe	er:	P		Report Options EDD EDF* - 10% Surcharge			Jones Project #	
Project Name RESEDA HIGH SCHOO	L PEA					Client Project # 450810	0	Shu	t-In Test:	7) 1					Criary	D-1525	
Project Address 18230 KITTRIDGE STREET				Turn Around Re	Tracer			Analysis Request			este	d	Page				
RESEDA ,CA Email Phone 310-344-6565				□ Immediate Atter □ Rush 24 Hours □ Rush 48 Hours □ Rush 72 Hours □ Normal □ Mobile Lab	ntion	n-pent n-hexa n-hept Helium	ane ane	terial (M)				Magnehelic Vacuum (In/H ₂ O)	1 of 2 Sample Container: GASTIGHT GLASS SYRINGE				
Report To JUSTIN KING	Report To Sampler						Reporting Limits Requested Units Commercial Residential Purge Rate						elic Vacuu	of Containers	jo		
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Soil Gas (SG),	EPA 826			Magnehe	Number	Notes & Special Instructions	
AOC4-SV1-5'	3	2810	9/15/18	7:55	7:57	D-1525-01	200	JOSH.1	M100-105					<2	1		
AOC4-SV1-15'	3	2980	9/15/18	8:10	8:13	D-1525-02	200	ANNALISE.2	118009	SG	Х		1	<2	1		
AOC4-SV1-15' REP	3	2980	9/15/18	8:32	8:33	D-1525-03	200	ANNALISE.2	118009	SG	Х		1	<2	1		
AOC4-SV2-5'	3	2810	9/15/18	7:22	7:23	D-1525-04	200	JOSH.1	M100-105	SG	Х			<2	1		
AOC4-SV2-15'	3	2980	9/15/18	7:36	7:39	D-1525-05	200	ANNALISE.2	118009	SG	Х		1	<2	1		
AOC4-SV3-5'	3	2810	9/15/18	8:45	8:47	D-1525-06	200	JOSH.1	M100-105	SG	Х		1	<2	1		
AOC4-SV3-15'	3	2980	9/15/18	9:01	9:05	D-1525-07	200	ANNALISE 2	118009	SG	X	\top	1	18	1		
AOC4-SV6-5'	3	2810	9/15/18	10:00	10:02	D-1525-08	200	JOSH 1	M100-105	SG	X			<2	1		-
AOC4-SV6-15'	3	2980	9/15/18	10:17	10:17	D-1525-09	200	ANNALISE,2	118009	SG	X		T	20	1		-
AOC4-SV8-5'	3	2810	9/15/18	9:25	9:27	D-1525-10	200	JOSH.1	M100-105	SG	Х			<2	1		
Relinquished By (Signature Peter)	52	Printed Nan	1/2+		uN	Received By (Signature)	a		JOEL	ed Nan ALMA					10	Total Number of Containers	
Relinquished By (Signature)		9/15/ Printed Nan	2018	Time 131	10	Company JONES ENVIRONMENTAL Received By Laboratory (/15/201 ed Nam		Time 13:	20		ack	t signature on this Chain of Custody form constitutes mowledgement that the above analyses have been ested, and the information provides herein is correct	7
Company		Date		Time		Gompany	13 of 14		Date			Time				and accurate	



11007 Forest PI. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Soil-Gas Chain-of-Custody Record

PARSONS Project Name						9/15/20	18	P	urge Number 3P a 7P	er: 10	Р	EDD			Report Options EDD EDF* - 10% Surcharge LAB USE ONLY Jones Project :		
RESEDA HIGH SCHOOL	I PFA					Client Project # 450810	1	Shut	t-In Test:	16	1		Global	ID		D-1525	
Project Address		-		-		450010	<u> </u>	-	1001.	, .							
18230 KITTRIDGE STRE	EET					Turn Around Re	quested	Т	racer		Ana	lysis	Requ	ieste	d	Page	
RESEDA,CA						□ Immediate Attention □ Rush 24 Hours		n-pentane n-hexane n-heptane								2 of 2	
Phone 310-344-6565				□ Rush 48 Hours □ Rush 72 Hours □ Normal		□ Helium	1	(W)				(H ₂ O)		Sample Container:			
				Mobile Lab				Material				ul) mnr	Containers	GASTIGHT GLASS SYRINGE If different than above, see Notes.			
Report To JUSTIN KING		Sampler	ALMAS	3		Reporting Li		sted sidential	Units 3	Bellic Vacu							
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Soil Gas (SC	EPA 8260B (VOCs)			Magnehelic Vacuum (In/H ₂ O)	Number	Notes & Special Instructions	
AOC4-SV8-15'	3	2980	9/15/18	9:39	9:41	D-1525-11	200	ANNALISE.2	118009	SG				14			
AOC4-SS8		100	9/15/18	11:39	11:46	D-1525-12	NA	HAND	118009	SG	X			<2	1		
AOC4-SS9	3	100	9/15/18	11:28	11:29	D-1525-13	NA	HAND	118009	SG	х			<2	1		
AOC4-SS10	3	100	9/15/18	12:30	12:33	D-1525-14	NA	HAND	118009	SG	Х			<2	1		
AOC4-SS11	3	100	9/15/18	12:45	12:51	D-1525-15	NA	HAND	118009	sg	х			<2	1		
AOC4-SS12	3	100	9/15/18	12:53	1:07	D-1525-16	NA	HAND	118009	SG	х			<2	1		
AOC4-SV15-5'	3	2810	9/15/18	10:40	10:41	D-1525-17	200	JOSH.1	M100-105	SG	X			<2	1		
AOC4-SV15-5' REP	3	2810	9/15/18	10:55	10.55	D-1525-18	200	JOSH.1	M100-105	SG	X			<2	1		
AOC4-SV15-15'	3	2980	9/15/18	11:10	11:11	D-1525-19	200	ANNALISE:2	118009	SG	Х			<2	4		
A													T				
Relinquished By (Signature)	5/2	Printed Nar	ne Ro	6 <	harr	Received B (Signature)	11			ed Nan			-1-		9	Total Number of Containers	
Company Parsa		Date 9-	15-18	Time 13	40	Company JONES ENVRONMENTAL	L INC.	·	Date	/15/20	18	Time					
Relinquished By (Signature)		Printed Nar	ne			Received By Laboratory (ed Nan		12	:20	/	acl	nt signature on this Chain of Custody form constitutes knowledgement that the above analyses have been ested, and the information provided herein is correct	
Company		Date		Time	******	Company	14 of 14		Date			Titne			Tode	and accurate.	

Report date:

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 West Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School PEA

Project Address: 18230 Kittridge Street

Reseda, CA

JEL Ref. No.: E-0915 Client Ref. No.: 450810

9/19/2018

Date Sampled: 9/19/2018

Date Received: 9/19/2018 **Date Analyzed:** 9/19/2018

Physical State: Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

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

JONES ENVIRONMENTAL LABORATORY RESULTS

Client:ParsonsReport date:9/19/2018Client Address:100 West Walnut StreetJones Ref. No.:E-0915

Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/19/2018

Reseda High School PEA

Reseda High School PEA

18230 Kittridge Street

Date Analyzed: 9/19/2018

Physical State: Soil Gas

Reseda, CA

Project:

Project Address:

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: AOC4-SV13- AOC4-SV14- AOC4-SV14- AOC4-SV14- 5' 15' 5' 15' AOC4-SS4

Analytes: E-0713-01 E-0713-02 E-0713-03 E-0713-04 E-0713-03 Quantitation I	<u>Units</u> 1g/m3 1g/m3
Analytes.	-
Benzene ND ND ND ND ND 8 µ	-
•	19/1117
·	ıg/m3
	ıg/1113 ıg/m3
·	-
• • • • • • • • • • • • • • • • • • • •	ιg/m3
·	ıg/m3
· ·	ıg/m3
	ıg/m3
	ıg/m3
·	ıg/m3
•	ıg/m3
·	ıg/m3
	ıg/m3
	ıg/m3
	ıg/m3
Dibromomethane ND ND ND ND ND 8 µ	ιg/m3
1,2- Dichlorobenzene ND ND ND ND ND 8 µ	ιg/m3
1,3-Dichlorobenzene ND ND ND ND ND 8 µ	ıg/m3
1,4-Dichlorobenzene ND ND ND ND ND 8 µ	ıg/m3
Dichlorodifluoromethane ND ND ND ND ND 8	ıg/m3
1,1-Dichloroethane ND ND ND ND ND 8 µ	ıg/m3
1,2-Dichloroethane ND ND ND ND ND 8	ıg/m3
1,1-Dichloroethene ND ND ND ND ND 8	ıg/m3
	ıg/m3
trans-1,2-Dichloroethene ND ND ND ND ND 8 µ	ıg/m3
, ·	ıg/m3
, r r	ıg/m3
· · · · · · · · · · · · · · · · · · ·	ıg/m3
, 1 1	ıg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SV13-	AOC4-SV13-	AOC4-SV14-	- AOC4-SV14-	AOC4-SS4
Sample 1D.	5'	15'	5'	15'	AUC4-334

	-		-				
Jones ID:	E-0915-01	E-0915-02	E-0915-03	E-0915-04	E-0915-05	Practical Quantitation	<u>Units</u>
Analytes:						<u>Limit</u>	
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	$\mu g/m3$
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Ethylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Freon 113	ND	ND	ND	ND	ND	40	μg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Isopropylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
4-Isopropyltoluene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Methylene chloride	ND	ND	ND	ND	ND	8	$\mu g/m3$
Naphthalene	ND	ND	ND	ND	ND	40	$\mu g/m3$
n-Propylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Styrene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
Tetrachloroethene	551	722	947	984	757	8	$\mu g/m3$
Toluene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	40	$\mu g/m3$
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
Trichloroethene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,4-Trimethylbenzene	ND	ND	ND	9	ND	8	$\mu g/m3$
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Vinyl chloride	ND	ND	ND	ND	ND	8	μg/m3
m,p-Xylene	ND	ND	ND	ND	ND	8	$\mu g/m3$
o-Xylene	ND	ND	ND	ND	ND	8	$\mu g/m3$
MTBE	ND	ND	ND	ND	ND	40	μg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	$\mu g/m3$
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	$\mu g/m3$
TIC:							
n-Pentane	ND	ND	ND	ND	ND	400	$\mu g/m3$
n-Hexane	ND	ND	ND	ND	ND	400	$\mu g/m3$
n-Heptane	ND	ND	ND	ND	ND	400	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Limi	<u>its</u>
1,2-Dichloroethane-d4	111%	111%	127%	129%	130%	60 - 140)
Toluene-d ₈	102%	102%	102%	102%	102%	60 - 140)
4-Bromofluorobenzene	97%	100%	100%	100%	100%	60 - 140)
	E1-091918-	E1-091918-	E1-091918-	E1-091918-	E1-091918-		
	01	01	01	01	01		
ND- N-4 D-44-1							

ND= Not Detected

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 9/19/2018 **Client Address:** 100 West Walnut Street Jones Ref. No.: E-0915

Pasadena, CA 91124 **Client Ref. No.:** 450810

9/19/2018 Justin King **Date Sampled:** Attn:

9/19/2018 **Date Received:** Reseda High School PEA **Date Analyzed:** 9/19/2018 **Project Address:** 18230 Kittridge Street **Physical State:** Soil Gas

Reseda, CA

Project:

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

AOC4-SV10- AOC4-SV10-AOC4-SS5 AOC4-SS7 AOC4-SS3 Sample ID: 15'

Jones ID: Analytes:	E-0915-06	E-0915-07	E-0915-08	E-0915-09	E-0915-10	Practical Quantitation Limit	<u>Units</u>
Benzene	ND	ND	ND	ND	ND	8	μg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	μg/m3 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	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	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	$\mu g/m3$
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
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	$\mu g/m3$
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	$\mu g/m3$

EPA 8260B – Volatilo	Organics by GC/MS	S + Oxygenates
----------------------	-------------------	----------------

			0	•			
Sample ID:	AOC4-SS5	AOC4-SS7	AOC4-SS3	AOC4-SV10- 5'	AOC4-SV10- 15'		
Jones ID:	E-0915-06	E-0915-07	E-0915-08	E-0915-09	E-0915-10	Practical Quantitation	<u>Units</u>
Analytes:						<u>Limit</u>	
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	$\mu g/m3$
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	8	$\mu g/m3$
Tetrachloroethene	866	1040	1300	1440	1110	8	μg/m3
Toluene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	40	$\mu g/m3$
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
Trichloroethene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	μg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	$\mu g/m3$
m,p-Xylene	ND	ND	ND	ND	ND	8	μg/m3
o-Xylene	ND	ND	ND	ND	ND	8	μg/m3
MTBE	ND	ND	ND	ND	ND	40	$\mu g/m3$
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
TIC:							
n-Pentane	ND	ND	ND	ND	ND	400	μg/m3
n-Hexane	ND	ND	ND	ND	ND	400	$\mu g/m3$
n-Heptane	ND	ND	ND	ND	ND	400	μg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Lim	its
1,2-Dichloroethane-d4	131%	130%	131%	130%	130%	60 - 140	
Toluene-d ₈	101%	101%	99%	100%	101%	60 - 140	
4-Bromofluorobenzene	103%	102%	97%	98%	97%	60 - 140	
	E1-091918-	E1-091918-	E1-091918-	E1-091918-	E1-091918-		
	01	01	01	01	01		
ND= Not Detected							

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 9/19/2018 100 West Walnut Street **Client Address:** Jones Ref. No.: E-0915

Pasadena, CA 91124 **Client Ref. No.:** 450810

9/19/2018 Justin King **Date Sampled:** Attn:

> **Date Received:** 9/19/2018 **Date Analyzed:** 9/19/2018

Project: Reseda High School PEA **Project Address:** 18230 Kittridge Street **Physical State:** Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SV10- 15' REP	AOC4-SS2	AOC4-SS1	AOC4-SV11- 5'	AOC4-SV11- 15'		
Jones ID: Analytes:	E-0915-11	E-0915-12	E-0915-13	E-0915-14	E-0915-15	Practical Quantitation Limit	<u>Units</u>
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	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	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	$\mu g/m3$
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	8	μg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	$\mu g/m3$
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	$\mu g/m3$
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	μg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	μg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	$\mu g/m3$

EPA 8260B – Volatile Organics by GC/MS + Oxygenates							
Sample ID:	AOC4-SV10- 15' REP	AOC4-SS2	AOC4-SS1	AOC4-SV11- 5'	AOC4-SV11- 15'		
Jones ID:	E-0915-11	E-0915-12	E-0915-13	E-0915-14	E-0915-15	Practical Quantitation	<u>Units</u>
Analytes:						<u>Limit</u>	
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	ND	8	μg/m3
4-Isopropyltoluene	ND	ND	ND	ND	ND	8	μg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	$\mu g/m3$
Naphthalene	ND	ND	ND	ND	ND	40	$\mu g/m3$
n-Propylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Styrene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
Tetrachloroethene	1070	1050	845	1080	911	8	$\mu g/m3$
Toluene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	40	$\mu g/m3$
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
Trichloroethene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	$\mu g/m3$
Vinyl chloride	ND	ND	ND	ND	ND	8	$\mu g/m3$
m,p-Xylene	ND	ND	ND	ND	ND	8	$\mu g/m3$
o-Xylene	ND	ND	ND	ND	ND	8	$\mu g/m3$
MTBE	ND	ND	ND	ND	ND	40	$\mu g/m3$
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	$\mu g/m3$
Di-isopropylether	ND	ND	ND	ND	ND	40	$\mu g/m3$
tert-amylmethylether	ND	ND	ND	ND	ND	40	$\mu g/m3$
tert-Butylalcohol	ND	ND	ND	ND	ND	400	$\mu g/m3$
TIC:							
n-Pentane	ND	ND	ND	ND	ND	400	$\mu g/m3$
n-Hexane	ND	ND	ND	ND	ND	400	$\mu g/m3$
n-Heptane	ND	ND	ND	ND	ND	400	$\mu g/m3$
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Lim	
1,2-Dichloroethane-d4	130%	129%	129%	133%	129%	60 - 14	
Toluene-d ₈	99%	101%	99%	99%	98%	60 - 14	
4-Bromofluorobenzene	97%	100%	97%	96%	97%	60 - 14	0
	E1-091918-	E1-091918-	E1-091918-	E1-091918-	E1-091918-		
	01	01	01	01	01		
ND= Not Detected							

7 of 14

JONES ENVIRONMENTAL LABORATORY RESULTS

Client:ParsonsReport date:9/19/2018Client Address:100 West Walnut StreetJones Ref. No.:E-0915

Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/19/2018

Project: Reseda High School PEA Date Analyzed: 9/19/2018
Project Address: 18230 Kittridge Street Physical State: Soil Gas

Reseda, CA

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: AOC4-SV9- AOC4-SV9- 5' 15'

Jones ID:	E-0915-16	E-0915-17	<u>Practical</u>	
Jones ID.	E-0713-10	E-0713-17	Quantitation	<u>Units</u>
Analytes:			<u>Limit</u>	
Benzene	ND	ND	8	$\mu g/m3$
Bromobenzene	ND	ND	8	$\mu g/m3$
Bromodichloromethane	ND	ND	8	$\mu g/m3$
Bromoform	ND	ND	8	$\mu g/m3$
n-Butylbenzene	ND	ND	8	$\mu g/m3$
sec-Butylbenzene	ND	ND	8	$\mu g/m3$
tert-Butylbenzene	ND	ND	8	$\mu g/m3$
Carbon tetrachloride	ND	ND	8	$\mu g/m3$
Chlorobenzene	ND	ND	8	$\mu g/m3$
Chloroform	ND	ND	8	$\mu g/m3$
2-Chlorotoluene	ND	ND	8	$\mu g/m3$
4-Chlorotoluene	ND	ND	8	$\mu g/m3$
Dibromochloromethane	ND	ND	8	$\mu g/m3$
1,2-Dibromo-3-chloropropane	ND	ND	8	$\mu g/m3$
1,2-Dibromoethane (EDB)	ND	ND	8	$\mu g/m3$
Dibromomethane	ND	ND	8	$\mu g/m3$
1,2- Dichlorobenzene	ND	ND	8	$\mu g/m3$
1,3-Dichlorobenzene	ND	ND	8	$\mu g/m3$
1,4-Dichlorobenzene	ND	ND	8	$\mu g/m3$
Dichlorodifluoromethane	ND	ND	8	$\mu g/m3$
1,1-Dichloroethane	ND	ND	8	$\mu g/m3$
1,2-Dichloroethane	ND	ND	8	$\mu g/m3$
1,1-Dichloroethene	ND	ND	8	$\mu g/m3$
cis-1,2-Dichloroethene	ND	ND	8	$\mu g/m3$
trans-1,2-Dichloroethene	ND	ND	8	$\mu g/m3$
1,2-Dichloropropane	ND	ND	8	$\mu g/m3$
1,3-Dichloropropane	ND	ND	8	$\mu g/m3$
2,2-Dichloropropane	ND	ND	8	$\mu g/m3$
1,1-Dichloropropene	ND	ND	8	$\mu g/m3$

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SV9-	AOC4-SV9-
Sample ID:	5'	15'

	C	10	
Jones ID:	E-0915-16	E-0915-17	Practical Overation Units
Analytes:			<u>Quantitation</u> <u>Units</u> <u>Limit</u>
•	ND	NID	
cis-1,3-Dichloropropene	ND	ND	8 μg/m3
trans-1,3-Dichloropropene	ND	ND	8 μg/m3 8 μg/m3
Ethylbenzene	ND	ND	
Freon 113	ND	ND	
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	844	680	8 μg/m3
Toluene	ND	ND	8 μg/m3
1,2,3-Trichlorobenzene	ND	ND	$40 \mu g/m3$
1,2,4-Trichlorobenzene	ND	ND	8 $\mu g/m3$
1,1,1-Trichloroethane	ND	ND	8 $\mu g/m3$
1,1,2-Trichloroethane	ND	ND	8 $\mu g/m3$
Trichloroethene	ND	ND	8 $\mu g/m3$
Trichlorofluoromethane	ND	ND	8 $\mu g/m3$
1,2,3-Trichloropropane	ND	ND	8 $\mu g/m3$
1,2,4-Trimethylbenzene	ND	ND	8 $\mu g/m3$
1,3,5-Trimethylbenzene	ND	ND	8 $\mu g/m3$
Vinyl chloride	ND	ND	8 $\mu g/m3$
m,p-Xylene	ND	ND	8 $\mu g/m3$
o-Xylene	ND	ND	8 $\mu g/m3$
MTBE	ND	ND	40 μg/m3
Ethyl-tert-butylether	ND	ND	$40 \mu g/m3$
Di-isopropylether	ND	ND	$40 \mu g/m3$
tert-amylmethylether	ND	ND	$40 \mu g/m3$
tert-Butylalcohol	ND	ND	400 μg/m3
TIC:			
n-Pentane	ND	ND	400 μg/m3
n-Hexane	ND	ND	400 µg/m ³
n-Heptane	ND	ND	400 μg/m3
Dilution Factor	1	1	
Surrogate Recoveries:			OC Limits
1,2-Dichloroethane-d4	130%	129%	60 - 140
Toluene-d ₈	98%	97%	60 - 140
4-Bromofluorobenzene	96%	95%	60 - 140
	E1-091918-	E1-091918-	
	01	01	
ND= Not Detected			

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:ParsonsReport date:9/19/2018Client Address:100 West Walnut StreetJones Ref. No.:E-0915

Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/19/2018

Date Received: 9/19/2018

Project:Reseda High School PEADate Analyzed:9/19/2018Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Sample ID:	METHOD BLANK	SAMPLING BLANK		
Jones ID:	091918- E1MB1	091918- E1SB1	<u>Practical</u> <u>Quantitation</u>	<u>Units</u>
Analytes:) ID	.	<u>Limit</u>	
Benzene	ND	ND	8	μg/m3
Bromobenzene	ND	ND	8	$\mu g/m3$
Bromodichloromethane	ND	ND	8	μg/m3
Bromoform	ND	ND	8	μg/m3
n-Butylbenzene	ND	ND	8	μg/m3
sec-Butylbenzene	ND	ND	8	$\mu g/m3$
tert-Butylbenzene	ND	ND	8	μg/m3
Carbon tetrachloride	ND	ND	8	$\mu g/m3$
Chlorobenzene	ND	ND	8	$\mu g/m3$
Chloroform	ND	ND	8	$\mu g/m3$
2-Chlorotoluene	ND	ND	8	$\mu g/m3$
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	$\mu g/m3$
Dibromomethane	ND	ND	8	$\mu g/m3$
1,2- Dichlorobenzene	ND	ND	8	μ g/m3
1,3-Dichlorobenzene	ND	ND	8	$\mu g/m3$
1,4-Dichlorobenzene	ND	ND	8	$\mu g/m3$
Dichlorodifluoromethane	ND	ND	8	$\mu g/m3$
1,1-Dichloroethane	ND	ND	8	$\mu g/m3$
1,2-Dichloroethane	ND	ND	8	$\mu g/m3$
1,1-Dichloroethene	ND	ND	8	$\mu g/m3$
cis-1,2-Dichloroethene	ND	ND	8	$\mu g/m3$
trans-1,2-Dichloroethene	ND	ND	8	$\mu g/m3$
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- E1MB1	091918- E1SB1		<u>Units</u>
Analytes:			<u>Limit</u>	
cis-1,3-Dichloropropene	ND	ND		μg/m3
trans-1,3-Dichloropropene	ND	ND		μg/m3
Ethylbenzene	ND	ND		μg/m3
Freon 113	ND	ND		μg/m3
Hexachlorobutadiene	ND	ND		μg/m3
Isopropylbenzene	ND	ND		μg/m3
4-Isopropyltoluene	ND	ND		μg/m3
Methylene chloride	ND	ND	8	μg/m3
Naphthalene	ND	ND	40 I	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	40	μg/m3
1,2,4-Trichlorobenzene	ND	ND	8	μg/m3
1,1,1-Trichloroethane	ND	ND	8	μg/m3
1,1,2-Trichloroethane	ND	ND		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		μg/m3
1,3,5-Trimethylbenzene	ND	ND	8	μg/m3
Vinyl chloride	ND	ND		μg/m3
m,p-Xylene	ND	ND		μg/m3
o-Xylene	ND	ND		μg/m3
MTBE	ND	ND		μg/m3
Ethyl-tert-butylether	ND	ND		μg/m3
Di-isopropylether	ND	ND		μg/m3
tert-amylmethylether	ND	ND		μg/m3
tert-Butylalcohol	ND	ND		μg/m3
TIC:				
n-Pentane	ND	ND	400	μg/m3
n-Hexane	ND	ND		μg/m3
n-Heptane	ND	ND		μg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			QC Limits	
1,2-Dichloroethane-d4	95%	114%	60 - 140	
Toluene-d ₈	102%	104%	60 - 140	
4-Bromofluorobenzene	100%	101%	60 - 140	
		E1-091918-		
	01	01		

ND= Not Detected

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 9/19/2018

Client Address: 100 West Walnut Street Jones Ref. No.: E-0915
Pasadena, CA 91124 Client Ref. No.: 450810

Attn: Justin King Date Sampled: 9/19/2018

Project: Reseda High School PEA Date Received: 9/19/2018

Date Received: 9/19/2018

Pate Analyzed: 9/19/2018

Project Address: 18230 Kittridge Street Physical State: Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Batch ID: E1-091918-01

Jones ID:	091918-E1LCS1	091918-E1LCSD1		091918-E1CCV1				
	LCS	LCSD		Acceptability		Acceptability		
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)	<u>CCV</u>	Range (%)		
Vinyl chloride	103%	103%	0.4%	70 - 130	36%	80 - 120		
1,1-Dichloroethene	95%	110%	14.2%	70 - 130	83%	80 - 120		
Cis-1,2-Dichloroethene	111%	115%	3.6%	70 - 130	117%	80 - 120		
1,1,1-Trichloroethane	154%	147%	4.8%	70 - 130	106%	80 - 120		
Benzene	104%	110%	6.1%	70 - 130	115%	80 - 120		
Trichloroethene	105%	110%	4.1%	70 - 130	114%	80 - 120		
Toluene	106%	115%	7.4%	70 - 130	114%	80 - 120		
Tetrachloroethene	101%	111%	9.6%	70 - 130	109%	80 - 120		
Chlorobenzene	102%	114%	11.3%	70 - 130	116%	80 - 120		
Ethylbenzene	95%	106%	10.4%	70 - 130	107%	80 - 120		
1,2,4 Trimethylbenzene	95%	106%	11.1%	70 - 130	106%	80 - 120		
Surrogate Recovery:								
1,2-Dichloroethane-d4	100%	98%		60 - 140	105%	60 - 140		
Toluene-d ₈	102%	101%		60 - 140	98%	60 - 140		
4-Bromofluorobenzene	101%	98%		60 - 140	103%	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%



11007 Forest PI. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Soil-Gas Chain-of-Custody Record

Client						Date 9/19/20	10		ourge Number		D	EDD_	rt Opti	LAB USE ONLY	
Project Name	-				-	Client Project #	10	- 11	tor all	111111111111111111111111111111111111111		EDF* 1	D% 50	charg	
RESEDA HIGH SCHOO	LPEA					45081	0	Shu	t-In Test)		*Global I	0		E-0915
Project Address					-	10001	-	-							
18230 KITTRIDGE STR	8230 KITTRIDGE STREET						Turn Around Requested				Anal	ysis Requ	este	d	Page
RESEDA, CA	ESEDA, CA						ncon	n-pentane n-hexane							1 of 2
Email						Rush 48 Hours Rush 72 Hours Normal		Co-heptane Helium 1.1-DFA		1 .			(In/H ₂ O)		Sample Container:
Phorie						XMobile Lab		1.1-DFA		10 = 0			Jun (In/	lers	GAS TIGHT GLASS SYRINGE
Report To JUSTIN KING		Sampler	LISE O	TOOL	E	Reporting Li	Reporting Limits Requested Units		elic Vacu	of Conta					
Sample ID	Purge Number	Purge Volunie (ml.)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Furge Rate (mL/min)			Sample N	EPA 8260		Magnehel	Numbero	Notes & Special Instructions
AOC4-SV13-5	3	2810	9/19/18	7:28	7:34	E-0915-01	200	MOLLAT	TSS 118008	SG	X		<2	2	
AOC4-SV13-151	3	2980	9/19/18	7:45	2.51	E-0915-02	200	STEVE.2	TSS 118009	SG	X.		<2	2	
AOC4-SV14-5	3	2810	9/19/18	7 55	8.08	E-0915-03	200	ANGELA	TSS 118008	SG	X		6	2	
AOC4-SV14-15'	3	2980	9/19/18	8 13	8.26	E-0915-04	200	STEVE.2	TSS 118009	SG	X.		<2	2	
AOC4-SS4	3	125	9/19/18	8:38	8:43	E-0915-05	200	HIND FURGED	M100.105	SG	Х		62	2	
AOC4-SS5	3	125	9/19/18	8,50	9.01	E-0915-06	200	HANG PURGED	M100.105	SG	X		<2	2	
AOC4-SS7	3	125	9/19/18	9:07	9:18	E-0915-07	200	HAND PURGED	M100.105	SG	x		<2	2	
AOC4-SS3	3	125	9/19/18	9:23	9:36	E-0915-08	200	HAND PURGED	M100.105	SG	х		<2	2	
AOC4-SV10-5'	3	2810	9/19/18	9:49	9:53	E-0915-09	200	ANGELA.1	TSS 118008	SG	х		<2	2	
AOC4-SV10-15'	3	2980	9/19/18	10:06	10:11	E-0915-10	200	STEVE.2	TSS 118009	SG	х		<2	2	8
Relinquished By (Signature)		Printed Nar	me Sh	air		Received By (Signature)	Tan	1	Printe Anu	ed Nar		OTON	9	20	Total Number of Containers
Company ParSons Relinquished By (Signature)		Date -/9-/ Printed Nar	8	124°	5	Company TOVES Received By Laboratory		nmer	Nate C		9-18	Time		ack	at signature on this Chain of Custody form constitutes knowledgement that the above analyses have been ested, and the information provided herein is correct
Company		Date		Time		Company			Date			Time			and accurate.



11007 Forest PI. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Soil-Gas Chain-of-Custody Record

Relinquished By (Signature) Company		Printed Nar		Time		Received By Laboratory (Signature)		Printe Date	d Nan	ie	Time		ack	it signature of this chain of custody form constitutes knowledgement that the above analyses have been ested, and the information provided herein is correct and accurate.
Company Parsons	9-	Date - 19-1	8	Time 1248				como	urta C	9-	19-1	Time		Clien	nt signature on this Chain of Custody form constitutes
Relinquished By (Signature)			me He SV	19%		Received By (Signature)	270	3ry	Printe			OTa	Re	14	Total Number of Containers
										_	+		-		
AOC4-SS6	-	-	9/19/18	8:40	-	E-0915-18	-	-	-	-	-		>100	-	NO FLOW
AOC4-SV9-15'	3	2980	9/19/18	12:06	12:15	E-0915-17	200	STEVE.2	TSS 118009	SG	X		4	2	
AOC4-SV9-5	3	2810	9/19/18	11:50	11:57	E-0915-16	200	ANGELA 1	TSS 118008	SG	X		<2	2	
AOC4-SV11-15'	3	2980	9/19/18	11:27	11:39	E-0915-15	200	STEVE.2	TSS 118009	SG	X		<2	2	
AOC4-SV11-5'	3	2810	9/19/18	11:10	11:21	E-0915-14	200	ANGELA 1	TSS 118008	SG	X		<2	2	
A0C4-SS1	3	125	9/19/18	10:54	11:04	E-0915-13	200	HAND PURGED	M100.105	SG	X		20	2	
AOC4-SS2	3	125	9/19/18	10:36	10:46	E-0915-12	200	HAND PURGED.	M100.105	SG	×		<2	2	
AOC4-SV10-15 REP	3	2980	9/19/18	10:22	10:29	E-UN15-11	200	STEVE.2	TSS 118009	SG	X		<2	2	
Sample-ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used		Sources (S	EPA 82		Magneh	Number	Notes & Special Instructions
Report To JUSTIN KING		_	LISE O	TOOL	E	Reporting Li		sted idential	units ualm ³	Matrix:	808		ehelic Vacuum	of Contai	
Phone						Mobile Lab	1,1-DFA					um (In/H ₂ O)	SJers	GAS TIGHT GLASS SYRINGE	
Email						Rush 48 Hours		n-heptane Helium					20)		Sample Container:
RESEDA, CA						□ Immediate Attention □ Rush 24 Hours		n-pentane				SIS Requ			Page 2 of 2
Project Address 18230 KITTRIDGE STRE	ET					Turn Around Re	Tracer			Analy	sis Requ	mata		Pass	
RESEDA HIGH SCHOOL	PEA					450810)	Shut	t-In Test) / N		*Global	ID		E-0915
PARSONS Project Name						9/19/20* Chant Project #	18	□ 1P	23P n7P	n 10	P	EDF*-	ION Su	charg	Jones Project #
Client						Date		P	urge Numbe	ır.			ort Opti	ons	LAB USE ONLY



714-449-9937 562-646-1611 805-399-0060 11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Reseda, CA 91335

Attn: Justin King

Project: Reseda High School
Project Address: 18230 Kittridge Street

Reseda High School

Report date:

JEL Ref. No.:

10/16/2018

ST-12784

Date Sampled: 10/9/2018 **Date Received:** 10/9/2018

10/9/2018 10/15/2018

Date Analyzed: Physical State:

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:

Colby Wakeman QA/QC Manager

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 10/16/2018
Client Address: 100 W. Walnut Street Jones Ref. No.: ST-12784

Reseda, CA 91335

Attn: Justin King Date Sampled: 10/9/2018

Project: Reseda High School Date Received: 10/9/2018

Date Received: 10/9/2018

Date Analyzed: 10/15/2018

Project Address: 18230 Kittridge Street Physical State: Soil Gas

Reseda High School

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

AOC4-SV17- AOC4-SV16- AOC4-SV16- AOC4-SV16- AOC4-SV16-

Sample ID: 5 15 5 15 15DUP

Jones ID:	ST-12784-01	ST-12784-02	ST-12784-03	ST-12784-04	ST-12784-05	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:							
Acetone	5.8 J	3.7 J	9.3 J	6.3 J	21.3	10.0	0.8
Acrolein	ND	1.5	ND	ND	1.7	1.0	0.5
Benzene	0.4 J	0.4 J	0.4 J	0.4 J	0.5 J	1.0	0.2
Benzyl chloride	ND	ND	ND	ND	ND	1.0	0.2
Bromodichloromethane	1.8	1.5	2.3	2.3	2.2	1.0	0.2
Bromoform	ND	ND	ND	ND	ND	1.0	0.1
Bromomethane	ND	ND	ND	ND	ND	1.0	1.0
1,3-Butadiene	ND	ND	ND	ND	ND	1.0	0.2
2-Butanone (MEK)	3.1	2.9	5.9	5.8	4.0	1.0	0.3
Carbon disulfide	ND	ND	1.9	1.0	1.4	1.0	0.4
Carbon tetrachloride	ND	ND	ND	ND	ND	1.0	0.2
Chlorobenzene	ND	ND	ND	ND	ND	1.0	0.1
Chloroform	1.3	1.2	1.8	2.8	2.6	1.0	0.2
Cyclohexane	1.8	1.1	0.8 J	0.9 J	1.0	1.0	0.2
Dibromochloromethane	1.6	ND	2.0	2.1	2.3	1.0	0.2
1,2-Dibromoethane	ND	ND	ND	ND	ND	1.0	0.2
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	1.0	0.3
1,3-Dichlorobenzene	ND	1.5	ND	1.4	ND	1.0	0.3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	1.0	0.3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	0.3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	0.2
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	0.5
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	0.5
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	0.2
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	1.0
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	1.0
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	1.0
1,4-Dioxane	ND	ND	ND	ND	ND	1.0	1.0
Ethanol	18.6	13.0	16.9	14.9	14.1	10.0	1.1

EPA TO-15-Volatile Organics by GC/MS in Air/ Summa Canister

AOC4-SV17- AOC4-SV17- AOC4-SV16- AOC4-SV16- AOC4-SV16- 5 15 15DUP

Jones ID:	ST-12784-01	ST-12784-02	ST-12784-03	ST-12784-04	ST-12784-05	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:						<u>(µg/mo)</u>	<u>(µ2/1115)</u>
Ethyl acetate	ND	ND	ND	ND	ND	1.0	0.4
Ethylbenzene	1.0	1.0	ND	1.0	1.0	1.0	0.1
4-Ethyltoluene	ND	ND	ND	ND	ND	1.0	0.1
4-Isopropyltoluene	ND	ND	ND	3.1	2.8	1.0	0.3
Freon 11	1.5	2.2	2.9	2.0	1.8	1.0	0.2
Freon 12	2.1	2.1	2.2	2.0	2.0	1.0	0.1
Freon 113	1.2	1.2	1.2	0.9 J	1.2	1.0	0.4
Freon 114	ND	ND	ND	ND	0.7 J	1.0	0.2
Hexachloro-1,3-butadiene	ND	ND	ND	ND	ND	1.0	0.2
2-Hexanone (MBK)	ND	ND	1.7	ND	1.6	1.0	0.2
Isopropyl Alcohol	ND	ND	1.5	ND	ND	10.0	0.6
Isopropylbenzene	ND	ND	ND	ND	ND	1.0	0.1
4-Methyl-2-pentanone (MIBK)	1.0	ND	1.4	1.6	1.0	1.0	0.2
Methylene chloride	0.6 J	0.5 J	0.6 J	0.6 J	1.5	1.0	0.3
MTBE	ND	ND	ND	ND	ND	1.0	0.2
Methylmethacrylate	ND	ND	ND	ND	ND	1.0	0.3
Naphthalene	3.4	4.0	3.0	3.8	3.7	1.0	0.2
Propylene	ND	ND	ND	ND	ND	1.0	0.4
Styrene	ND	ND	ND	ND	ND	1.0	0.2
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	0.1
Tetrachloroethene	1.7	3.1	2.8	9.7	8.7	1.0	0.2
Tetrahydrofuran	1.7	ND	1.2	ND	1.0	1.0	0.2
Toluene	ND	ND	ND	1.1	1.3	1.0	0.1
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	1.0	1.0
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	0.2
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	0.2
Trichloroethene	ND	ND	ND	ND	ND	1.0	0.3
1,2,4-Trimethylbenzene	1.9	1.9	1.8	ND	3.0	1.0	0.2
1,3,5-Trimethylbenzene	ND	ND	ND	1.7	ND	1.0	0.3
Vinyl Acetate	ND	ND	ND	ND	ND	1.0	0.3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	0.2
o-Xylene	1.7	1.7	ND	1.6	1.6	1.0	0.1
m/p-Xylene	2.6	2.1	ND	2.2	2.2	2.0	0.2
Tracer:							
n-pentane	ND	ND	ND	ND	ND	10.0	
n-hexane	ND	ND	ND	ND	22.1	10.0	
n-heptane	ND	33.3	31.4	ND	15.4	10.0	
<u>Dilution Factor</u>	1	1	1	1	1		
Surrogate Recovery: 4-Bromofluorobenzene	98%	99%	99%	98%	98%	<u>QC Limi</u> 60 - 140	

TO1-101618- TO1-101618- TO1-101618- TO1-101618- TO1-101618- IA-CHECKS IA-CHECKS IA-CHECKS IA-CHECKS

ND = Value below reporting limit

J = Value below reporting limit but above MDL

Physical State:

Soil Gas

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 10/16/2018
Client Address: 100 W. Walnut Street Jones Ref. No.: ST-12784

Reseda, CA 91335

Attn: Justin King Date Sampled: 10/9/2018

Project: Reseda High School Date Received: 10/9/2018

Project: Reseda High School Date Analyzed: 10/15/2018

Project Address: 18230 Kittridge Street Reseda High School

METHOD

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample ID: BLANK HBLK1-**Reporting Limit** MDL Jones ID: 101518-01 $(\mu g/m3)$ $(\mu g/m3)$ **Analytes:** ND 0.8 Acetone 10.0 Acrolein ND 1.0 0.5 ND 1.0 0.2 Benzene ND 0.2 Benzyl chloride 1.0 Bromodichloromethane ND 0.2 1.0 Bromoform ND 1.0 0.1 Bromomethane ND 1.0 1.0 1,3-Butadiene ND 1.0 0.2 2-Butanone (MEK) 0.3 ND 1.0 ND 0.4 Carbon disulfide 1.0 Carbon tetrachloride ND 1.0 0.2 Chlorobenzene ND 1.0 0.1 Chloroform ND 1.0 0.2 Cyclohexane ND 1.0 0.2 Dibromochloromethane 0.2 ND 1.0 1,2-Dibromoethane ND 0.2 1.0 1,2-Dichlorobenzene ND 1.0 0.3 ND 1.3-Dichlorobenzene 1.0 0.3 1,4-Dichlorobenzene ND 1.0 0.3 1.1-Dichloroethane ND 1.0 0.3 1,2-Dichloroethane ND 1.0 0.2 1,1-Dichloroethene ND 1.0 0.5 0.5 Cis-1,2-Dichloroethene ND 1.0 0.2 Trans-1,2-Dichloroethene ND 1.0 1,2-Dichloropropane ND 1.0 0.2 Cis-1,3-Dichloropropene ND 1.0 0.2 Trans-1,3-Dichloropropene ND 0.2 1.0 1,4-Dioxane ND 1.0 0.2 Ethanol ND 10.0 1.1

EPA TO-15-Volatile Organics by GC/MS in Air/ Summa Canister

ME'	THOD
DI	ANITZ

Sample ID:	BLANK		
Jones ID:	HBLK1- 101518-01	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:		<u>(µg/m3)</u>	(με/1113)
Ethyl acetate	ND	1.0	0.4
Ethyl benzene	ND	1.0	0.1
4-Ethyltoluene	ND	1.0	0.1
4-Isopropyltoluene	ND	1.0	0.3
Freon 11	ND	1.0	0.2
Freon 12	ND	1.0	0.1
Freon 113	ND	1.0	0.4
Freon 114	ND	1.0	0.2
Hexachloro-1,3-butadiene	ND	1.0	0.2
2-Hexanone (MBK)	ND	1.0	0.2
Isopropyl Alcohol	ND	10.0	0.6
Isopropylbenzene	ND	1.0	0.1
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.2
Methylene chloride	ND	1.0	0.3
MTBE	ND	1.0	0.2
Methylmethacrylate	ND	1.0	0.3
Naphthalene	ND	1.0	0.2
Propylene	ND	1.0	0.4
Styrene	ND	1.0	0.2
1,1,2,2-Tetrachloroethane	ND	1.0	0.1
Tetrachloroethene	ND	1.0	0.2
Tetrahydrofuran	ND	1.0	0.2
Toluene	ND	1.0	0.1
1,2,4-Trichlorobenzene	ND	1.0	0.2
1,1,1-Trichloroethane	ND	1.0	0.2
1,1,2-Trichloroethane	ND	1.0	0.2
Trichloroethene	ND	1.0	0.3
1,2,4-Trimethylbenzene	ND	1.0	0.2
1,3,5-Trimethylbenzene	ND	1.0	0.3
Vinyl Acetate	ND	1.0	0.3
Vinyl chloride	ND	1.0	0.2
o-Xylene	ND	1.0	0.1
p/m-Xylene	ND	2.0	0.2
Tracer:			
n-pentane	ND	10.0	
n-hexane	ND	10.0	
n-heptane	ND	10.0	
Dilution Factor	1		
Surrogate Recovery: 4-Bromofluorobenzene	99%	<u>QC Lim</u> 60 - 140	
	TO1-101618-		

IA-CHECKS

ND = Value below reporting limit

714-449-9937 562-646-1611 805-399-0060

11007 FOREST PLACE SANTA FE SPRINGS, CA 90670 WWW.JONESENV.COM

JONES ENVIRONMENTAL **QUALITY CONTROL INFORMATION**

Client: Parsons Report date:

10/16/2018

Client Address:

100 W. Walnut Street Reseda, CA 91335

Jones Ref. No.:

ST-12784

Attn:

Justin King

Date Sampled: Date Received:

10/9/2018 10/9/2018

Project:

Reseda High School 18230 Kittridge Street

Date Analyzed: Physical State:

10/15/2018 Soil Gas

Project Address:

Reseda High School

EPA TO-15 - Volatile Organics by GC/MS in Air/ Summa Canister

Sample Spiked:

HUMIDIFIED NITROGEN

GC#: TO1-101518-IA-CHECKS

Jones ID:	

	CCV	CCVD		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)
Vinyl Chloride	79%	79%	0.0%	70-130
1,1-Dichloroethylene	86%	86%	0.0%	70-130
Cis-1,2-Dichloroethene	91%	79%	14.1%	70-130
1,1,1-Trichloroethane	102%	99%	2.4%	70-130
Benzene	101%	103%	2.4%	70-130
Trichloroethylene	94%	100%	5.8%	70-130
Toluene	102%	102%	0.0%	70-130
Tetrachloroethene	114%	114%	0.0%	70-130
Chlorobenzene	110%	112%	2.2%	70-130
Ethylbenzene	105%	105%	0.0%	70-130
1,2,4 Trimethylbenzene	106%	104%	2.3%	70-130
Surrogate Recovery:				
4-Bromofluorobenzene	100%	99%		60 - 140

MS = Matrix Spike

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



11007 Forest PI.
Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685

Soil-Gas Chain of Custody Record

Pol Sons							Date Oct 9 2018 Client Project#			Purge Number: 1P 13P 17P 10P Shut-In Test: N Flow Rate: 200			Report Options EDD EDF* - 10% Surcharge *Global ID				Jones Project # ST - 12784 Page	
8230 K: Hr.Jac St						Turn Around R	If different than above, see Notes. Tracer:				Analysis Requested					of		
Reseda CA 91335				□ Immediate / □ Rush 24 Ho □ Rush 48 Ho □ Rush 72 Ho								Sample Condition as Recieved: Sealed yes no Sample Container:						
hone		7				□ Mobile Lab			- 1,1-l	-	-	(A)			ul) mnr	ainers	If different than above, see Notes.	
eport To Sampler					Repor	quested: Residential					30B	.15	ic Vacı	f Containers				
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	EPA 8260B	EPA TO-15	Magnehelic Vacuum (In/H ₂ O)	Number of	Notes & Special Instructions	
40C4-SVI7-5	3	2010	10/9	71		51-12784-01	1582	-29	-5	14:55		0,0		X	5	1		
DC4-5V17-15	3	2980	10/2	E3		ST-12784-02	All and the second	-29	-4	14:57	15:02			X	5	1		
bc4-5VIL-5	3	2810	10/4	E3		57-12784-03	B2451	-30	-5	15:27	15:33			X	5	1		
10C4-5VIC-15	3	2900	10/9	21		ST-12784-04	1513B	-30	-5	15:25	15:31			X	5	1		
604-5VIC.1524P	3	2980	10/0	71		ST-12181-65	1498	-29	-5	13:25	15:31			X	5	1		
																1		
olinquished By (Signature)	7.	Printed Nam	ne kin			Received By (Signature)	624		C	ed Name	akemo						Total Number of Containers	
mpanv OCSOO) Ilinquished By (Signature)	10	Date:	}	Time: 1575		Company Socs E Received By Laboratory		nta	Date:		Time):			con	stitute	nature on this Chain of Custody form is acknowledgement that the above we been reqested, and the information	
mbanv		Date:		Time:		Company	7 of 7		Date		Time	:			р	rovide	d herein is correct and accurate.	



JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons

Client Address: 100 W. Walnut Street

Pasadena, CA 91124

Attn: Justin King

Project Name: Reseda High School PEA
Project Address: 18230 Kittridge Street

Reseda, CA

Report date: 1/7/2019 **ST-13162**

Date Sampled: 1/3/2019 **Date Received:** 1/3/2019

Date Analyzed: 1/4/2019 **Physical State:** Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

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 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.

Analytical – Soil Gas samples were analyzed using EPA Method 8260B 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.

Approval:

Angela Haar, Ph. D. Mobile Lab Manager

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 1/7/2019
Client Address: 100 W. Walnut Street Jones Ref. No.: ST-13162

Pasadena, CA 91124

Attn: Justin King Date Sampled: 1/3/2019

Date Received: 1/3/2019

Project:Reseda High School PEADate Analyzed:1/4/2019Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

Sample ID:

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

AOC4-SV16- AOC4-SV16- AOC4-SV17- AOC-SV17-

' 15' 15' DUP 5' 15'

Jones ID: Analytes:	ST-13162-01	ST-13162-02	ST-13162-03	ST-13162-04	ST-13162-05	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Benzene	ND	ND	ND	ND	ND	8	4
Bromobenzene	ND	ND	ND	ND	ND	8	5
Bromodichloromethane	ND	ND	ND	ND	ND	8	6
Bromoform	ND	ND	ND	ND	ND	8	5
n-Butylbenzene	ND	ND	ND	ND	ND	8	3
sec-Butylbenzene	ND	ND	ND	ND	ND	8	2
tert-Butylbenzene	ND	ND	ND	ND	ND	8	3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	4
Chlorobenzene	ND	ND	ND	ND	ND	8	3
Chloroform	ND	ND	ND	ND	ND	8	5
2-Chlorotoluene	ND	ND	ND	ND	ND	8	4
4-Chlorotoluene	ND	ND	ND	ND	ND	8	4
Dibromochloromethane	ND	ND	ND	ND	ND	8	3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	4
Dibromomethane	ND	ND	ND	ND	ND	8	6
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	8	4
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	8	3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	8	3
Dichlorodifluoromethane	4 J	4 J	4 J	4 J	4J	8	3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	4
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	7
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	4
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	5
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	4
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	4
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	4
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	8

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SV16-	AOC4-SV10	6- AOC4-SV16- <i>A</i>	AOC4-SV17	7- AOC-SV17-
Sample 1D:	5'	15'	15' DUP	5'	15'

Jones ID:	ST-13162-01	ST-13162-02	ST-13162-03	ST-13162-04	ST-13162-05	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:						<u>(µg/m3)</u>	<u>(μg/III3)</u>
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	3
Ethylbenzene	ND	ND	ND	ND	ND	8	3
Freon 113	ND	ND	ND	ND	ND	40	5
Hexachlorobutadiene	ND	ND	ND	ND	ND	8	5
Isopropylbenzene	ND	ND	ND	ND	ND	8	3
4-Isopropyltoluene	ND	ND	ND	ND	ND	8	3
Methylene chloride	ND	ND	ND	ND	ND	8	5
Naphthalene	ND	ND	ND	ND	ND	40	2
n-Propylbenzene	ND	ND	ND	ND	ND	8	3
Styrene	ND	ND	ND	ND	ND	8	3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	4
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	6
Tetrachloroethene	9	15	13	5 J	ND	8	4
Toluene	ND	ND	ND	ND	ND	8	3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	40	4
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	8	3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	4
Trichloroethene	ND	ND	ND	ND	ND	8	4
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	5
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	4
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	4
Vinyl chloride	ND	ND	ND	ND	ND	8	2
m,p-Xylene	ND	ND	ND	ND	ND	16	6
o-Xylene	ND	ND	ND	ND	ND	8	3
MTBE	ND	ND	ND	ND	ND	40	4
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	3
Di-isopropylether	ND	ND	ND	ND	ND	40	4
tert-amylmethylether	ND	ND	ND	ND	ND	40	2
tert-Butylalcohol	ND	ND	ND	ND	ND	400	41
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	40	
n-Hexane	ND	ND	ND	ND	ND	40	
n-Heptane	ND	ND	ND	ND	ND	40	
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Limi	
Dibromofluoromethane	98%	95%	91%	101%	96%	60 - 140	
Toluene-d ₈	94%	90%	87%	96%	91%	60 - 140	
4-Bromofluorobenzene	92%	91%	86%	96%	92%	60 - 140)
	F1-010418-	F1-010418-	F1-010418-	F1-010418-	F1-010418-		
	01	01	01	01	01		

ND= Value less than reporting limit

J = Value below reporting limit but above MDL

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 1/7/2019 **Client Address:** 100 W. Walnut Street Jones Ref. No.: ST-13162

Pasadena, CA 91124

Justin King **Date Sampled:** 1/3/2019 Attn:

> **Date Received:** 1/3/2019

Project: Reseda High School PEA **Date Analyzed:** 1/4/2019 **Project Address:** 18230 Kittridge Street **Physical State:** Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

AOC4-SV12- AOC4-SV12- AOC4-SV5- AOC4-SV5- AOC4-SV10-Sample ID:

15' 15'

Jones ID:	ST-13162-06	ST-13162-07	ST-13162-08	ST-13162-09	ST-13162-10	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:							
Benzene	ND	ND	ND	ND	ND	8	4
Bromobenzene	ND	ND	ND	ND	ND	8	5
Bromodichloromethane	ND	ND	ND	ND	ND	8	6
Bromoform	ND	ND	ND	ND	ND	8	5
n-Butylbenzene	ND	ND	ND	ND	ND	8	3
sec-Butylbenzene	ND	ND	ND	ND	ND	8	2
tert-Butylbenzene	ND	ND	ND	ND	ND	8	3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	4
Chlorobenzene	ND	ND	ND	ND	ND	8	3
Chloroform	ND	ND	ND	ND	ND	8	5
2-Chlorotoluene	ND	ND	ND	ND	ND	8	4
4-Chlorotoluene	ND	ND	ND	ND	ND	8	4
Dibromochloromethane	ND	ND	ND	ND	ND	8	3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	4
Dibromomethane	ND	ND	ND	ND	ND	8	6
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	8	4
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	8	3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	8	3
Dichlorodifluoromethane	6 J	4 J	6 J	5 J	5J	8	3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	4
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	7
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	4
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	5
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	4
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	4
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	3
2,2-Dichloropropane	ND	ND	ND	ND	ND	8	4
1,1-Dichloropropene	ND	ND	ND	ND	ND	8	8

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SV12-	AOC4-SV12-	AOC4-SV5-	AOC4-SV5-	AOC4-SV10-
Sample ID:	5'	15'	5'	15'	5'

Jones ID:	ST-13162-06	ST-13162-07	ST-13162-08	ST-13162-09	ST-13162-10	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	3
Ethylbenzene	ND	ND	ND	ND	ND	8	3
Freon 113	ND	ND	ND	ND	ND	40	5
Hexachlorobutadiene	ND	ND	ND	ND	ND	8	5
Isopropylbenzene	ND	ND	ND	ND	ND	8	3
4-Isopropyltoluene	ND	ND	ND	ND	ND	8	3
Methylene chloride	ND	ND	ND	ND	ND	8	5
Naphthalene	ND	ND	ND	ND	ND	40	2
n-Propylbenzene	ND	ND	ND	ND	ND	8	3
Styrene	ND	ND	ND	ND	ND	8	3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	4
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	6
Tetrachloroethene	36	167	15	11	481	8	4
Toluene	ND	ND	ND	ND	ND	8	3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	40	4
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	8	3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	4
Trichloroethene	ND	ND	ND	ND	ND	8	4
Trichlorofluoromethane	ND	ND	ND	ND	ND	8	5
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	4
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	4
Vinyl chloride	ND	ND	ND	ND	ND	8	2
m,p-Xylene	ND	ND	ND	ND	ND	16	6
o-Xylene	ND	ND	ND	ND	ND	8	3
MTBE	ND	ND	ND	ND	ND	40	4
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	3
Di-isopropylether	ND	ND	ND	ND	ND	40	4
tert-amylmethylether	ND	ND	ND	ND	ND	40	2
tert-Butylalcohol	ND	ND	ND	ND	ND	400	41
tert-Butyfalconor	ND	ND	ND	ND	ND	100	11
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	40	
n-Hexane	ND	ND	ND	ND	ND	40	
n-Heptane	ND	ND	ND	ND	ND	40	
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						QC Limi	
Dibromofluoromethane	91%	97%	84%	84%	89%	60 - 140	
Toluene-d ₈	87%	92%	80%	79%	84%	60 - 140	
4-Bromofluorobenzene	86%	91%	80%	76%	82%	60 - 140)
	F1-010418-	F1-010418-	F1-010418-	F1-010418-	F1-010418-		
	01	01	01	01	01		

ND= Value less than reporting limit

J = Value below reporting limit but above MDL

JONES ENVIRONMENTAL LABORATORY RESULTS

Client: Parsons Report date: 1/7/2019 **Client Address:** 2201 Dupont Dr. #200 Jones Ref. No.: ST-13162

Irvine, CA 92612

Justin King **Date Sampled:** 1/3/2019 Attn:

> **Date Received:** 1/3/2019

Project: Reseda High School PEA **Date Analyzed:** 1/4/2019 **Project Address:** 18230 Kittridge Street Soil Gas

Physical State: Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

AOC4-SV10-Sample ID:

15'

Jones ID: Analytes:	ST-13162-11	Reporting Limit (μg/m3)	<u>MDL</u> (μg/m3)
Benzene	ND	8	4
Bromobenzene	ND	8	5
Bromodichloromethane	ND	8	6
Bromoform	ND	8	5
n-Butylbenzene	ND	8	3
sec-Butylbenzene	ND	8	2
tert-Butylbenzene	ND	8	3
Carbon tetrachloride	ND	8	4
Chlorobenzene	ND	8	3
Chloroform	ND	8	5
2-Chlorotoluene	ND	8	4
4-Chlorotoluene	ND	8	4
Dibromochloromethane	ND	8	3
1,2-Dibromo-3-chloropropane	ND	8	8
1,2-Dibromoethane (EDB)	ND	8	4
Dibromomethane	ND	8	6
1,2- Dichlorobenzene	ND	8	4
1,3-Dichlorobenzene	ND	8	3
1,4-Dichlorobenzene	ND	8	3
Dichlorodifluoromethane	4 J	8	3
1,1-Dichloroethane	ND	8	4
1,2-Dichloroethane	ND	8	7
1,1-Dichloroethene	ND	8	4
cis-1,2-Dichloroethene	ND	8	5
trans-1,2-Dichloroethene	ND	8	4
1,2-Dichloropropane	ND	8	4
1,3-Dichloropropane	ND	8	3
2,2-Dichloropropane	ND	8	4
1,1-Dichloropropene	ND	8	8

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID:	AOC4-SV10-
Sample 1D:	151

Jones ID:	ST-13162-11	Reporting Limit (µg/m3)	<u>MDL</u> (μg/m3)
Analytes:			
cis-1,3-Dichloropropene	ND	8	3
trans-1,3-Dichloropropene	ND	8	3
Ethylbenzene	ND	8	3
Freon 113	ND	40	5
Hexachlorobutadiene	ND	8	5
Isopropylbenzene	ND	8	3
4-Isopropyltoluene	ND	8	3
Methylene chloride	ND	8	5
Naphthalene	ND	40	2
n-Propylbenzene	ND	8	3
Styrene	ND	8	3
1,1,1,2-Tetrachloroethane	ND	8	4
1,1,2,2-Tetrachloroethane	ND	8	6
Tetrachloroethene	414	8	4
Toluene	ND	8	3
1,2,3-Trichlorobenzene	ND	40	4
1,2,4-Trichlorobenzene	ND	8	3
1,1,1-Trichloroethane	ND	8	5
1,1,2-Trichloroethane	ND	8	4
Trichloroethene	ND	8	4
Trichlorofluoromethane	ND	8	5
1,2,3-Trichloropropane	ND	8	4
1,2,4-Trimethylbenzene	ND	8	3
1,3,5-Trimethylbenzene	ND	8	4
Vinyl chloride	ND	8	2
m,p-Xylene	ND	16	6
o-Xylene	ND	8	3
MTBE	ND	40	4
Ethyl-tert-butylether	ND	40	3
Di-isopropylether	ND	40	4
tert-amylmethylether	ND	40	2
tert-Butylalcohol	ND	400	41
Tracer:			
n-Pentane	ND	40	
n-Hexane	ND	40	
n-Heptane	ND	40	
Dilution Factor	1		
Surrogate Recoveries:		QC Limi	
Dibromofluoromethane	103%	60 - 140	
Toluene-d ₈	98%	60 - 140	
4-Bromofluorobenzene	97%	60 - 140)
	F1-010418-		
	01		

ND= Value less than reporting limit

J = Value below reporting limit but above MDL

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 1/7/2019 **Client Address:** 100 W. Walnut Street Jones Ref. No.: ST-13162

Pasadena, CA 91124

Justin King **Date Sampled:** 1/3/2019 Attn:

> **Date Received:** 1/3/2019

Project: Reseda High School PEA **Date Analyzed:** 1/4/2019 **Project Address:** Soil Gas

18230 Kittridge Street **Physical State:**

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Sample ID:	METHOD BLANK	SAMPLING BLANK		
Jones ID:	010418- F1MB1	010418- F1SB1	<u>Reporting Limit</u> (μg/m3)	<u>MDL</u> (μg/m3)
Analytes:				<u></u>
Benzene	ND	ND	8	4
Bromobenzene	ND	ND	8	5
Bromodichloromethane	ND	ND	8	6
Bromoform	ND	ND	8	5
n-Butylbenzene	ND	ND	8	3
sec-Butylbenzene	ND	ND	8	2
tert-Butylbenzene	ND	ND	8	3
Carbon tetrachloride	ND	ND	8	4
Chlorobenzene	ND	ND	8	3
Chloroform	ND	ND	8	5
2-Chlorotoluene	ND	ND	8	4
4-Chlorotoluene	ND	ND	8	4
Dibromochloromethane	ND	ND	8	3
1,2-Dibromo-3-chloropropane	ND	ND	8	8
1,2-Dibromoethane (EDB)	ND	ND	8	4
Dibromomethane	ND	ND	8	6
1,2- Dichlorobenzene	ND	ND	8	4
1,3-Dichlorobenzene	ND	ND	8	3
1,4-Dichlorobenzene	ND	ND	8	3
Dichlorodifluoromethane	ND	ND	8	3
1,1-Dichloroethane	ND	ND	8	4
1,2-Dichloroethane	ND	ND	8	7
1,1-Dichloroethene	ND	ND	8	4
cis-1,2-Dichloroethene	ND	ND	8	5
trans-1,2-Dichloroethene	ND	ND	8	4
1,2-Dichloropropane	ND	ND	8	4
1,3-Dichloropropane	ND	ND	8	3
2,2-Dichloropropane	ND	ND	8	4
1,1-Dichloropropene	ND	ND	8	8

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Dines ID: FIMBI FISBI	Sample ID:	METHOD BLANK	SAMPLING BLANK		
Sample S	Jones ID:				
Ethylbenzene	Analytes:			<u>(µg/m5)</u>	<u>(µg/ms)</u>
Ethylbenzene	cis-1,3-Dichloropropene	ND	ND	8	3
Freen 13	trans-1,3-Dichloropropene	ND	ND	8	3
Hexachlorobutadiene	Ethylbenzene	ND	ND	8	
Isopropylbenzene	Freon 113	ND	ND	40	
A-Isopropyltoluene	Hexachlorobutadiene	ND	ND	8	5
Methylene chloride	Isopropylbenzene	ND	ND	8	3
Naphthalene	4-Isopropyltoluene	ND	ND	8	
No		ND	ND	8	5
Styrene	Naphthalene	ND	ND	40	2
Syrene	n-Propylbenzene	ND	ND	8	3
1,1,2,2-Tetrachloroethane		ND	ND	8	3
1,1,2,2-Tetrachloroethane	1,1,2-Tetrachloroethane	ND	ND	8	4
Toluene		ND	ND	8	6
1,2,3-Trichlorobenzene	Tetrachloroethene	ND	ND	8	4
1,2,4-Trichlorobenzene	Toluene	ND	ND	8	3
1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	ND	ND	40	4
1,1,1-Trichloroethane				8	3
1,1,2-Trichloroethane		ND	ND	8	5
Trichloroethene ND ND R 4 Trichlorofluoromethane ND ND 8 5 1,2,3-Trichloropropane ND ND 8 4 1,2,4-Trimethylbenzene ND ND 8 3 1,3,5-Trimethylbenzene ND ND 8 4 Vinyl chloride ND ND 8 2 m,p-Xylene ND ND 16 6 o-Xylene ND ND 40 4 Ethyl-tert-butylether ND ND 40 4 Ethyl-tert-butylether ND ND ND 4 Ethyl-tert-butylether ND ND 40 4 Ethyl-tert-butylether ND ND 40 4 tert-abutylether ND ND 40 2 tert-Butylacholol ND ND 40 4 n-Pentane ND ND 40 4 n-Hexane ND				8	4
Trichlorofluoromethane		ND		8	4
1,2,3-Trichloropropane		ND		8	5
1,2,4-Trimethylbenzene				8	4
ND ND ND ND ND ND ND ND				8	3
Vinyl chloride ND ND R 2 m.p-Xylene ND ND 16 6 o-Xylene ND ND 8 3 MTBE ND ND 40 4 Ethyl-tert-butylether ND ND 40 3 Di-i-sopropylether ND ND 40 4 tert-amylmethylether ND ND 40 2 tert-Butylalcohol ND ND 40 4 TIC: n-Pentane ND ND 40 4 n-Hexane ND ND 40 4 n-Heptane ND ND 40 4 n-Heptane ND ND 40 4 Dilution Factor 1 1 1 1 Surrogate Recoveries: OC Limits 60 - 140 Dibromofluoromethane 96% 86% 60 - 140 4-Bromofluorobenzene 91% <t< td=""><td></td><td></td><td></td><td>8</td><td>4</td></t<>				8	4
m,p-Xylene ND ND ND 6 1 6 6 6 1 4 1 <				8	2
o-Xylene ND ND 8 3 MTBE ND ND ND 40 4 Ethyl-tert-butylether ND ND ND 3 Di-isopropylether ND ND ND 4		ND		16	6
MTBE ND ND 40 4 Ethyl-tert-butylether ND ND A0 3 Di-isopropylether ND ND 40 4 tert-amylmethylether ND ND 40 2 tert-Butylalcohol ND ND 40 41 TIC: n-Pentane ND ND 40<		ND		8	3
Ethyl-tert-butylether ND ND 40 3 Di-isopropylether ND ND 40 4 tert-amylmethylether ND ND 40 2 tert-Butylalcohol ND ND 40 41 TIC: n-Pentane ND ND 40 40 40 40 40 60 40 60 1		ND		40	4
Di-isopropylether ND ND 40 4 tert-amylmethylether ND ND 40 2 tert-Butylalcohol ND ND 40 41 TIC: n-Pentane ND ND 40 40 1 2 1 <	Ethyl-tert-butylether	ND		40	3
tert-amylmethylether ND ND 40 2 tert-Butylalcohol ND ND 40 41 TIC: n-Pentane ND ND 40 n-Hexane ND ND 40 n-Heptane ND ND 40 Dilution Factor 1 1 1 Surrogate Recoveries: Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140				40	4
tert-Butylalcohol ND ND 400 41 TIC: n-Pentane ND ND 40 n-Hexane ND ND 40 n-Heptane ND ND 40 Dilution Factor 1 1 1 Surrogate Recoveries: Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418- F1-010418- F1-010418-				40	2
TIC: n-Pentane ND ND 40 n-Hexane ND ND 40 n-Heptane ND ND 40 Dilution Factor 1 1 1 Surrogate Recoveries: Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418- F1-010418- F1-010418-		ND		400	41
n-Pentane ND ND 40 n-Hexane ND ND 40 n-Heptane ND ND 40 Dilution Factor 1 1 Surrogate Recoveries: Surrogate Recoveries: OC Limits Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140	•				
n-Hexane n-Heptane ND ND ND ND 40 40 Dilution Factor 1 1 Surrogate Recoveries: Dibromofluoromethane Toluene-ds 4-Bromofluorobenzene 96% 93% 93% 78% 60 - 140 4-Bromofluorobenzene 86% 91% 79% 60 - 140 60 - 140 F1-010418- F1-010418- F1-010418-	TIC:				
n-Heptane ND ND 40 Dilution Factor 1 1 Surrogate Recoveries: OC Limits Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140	n-Pentane	ND	ND	40	
Dilution Factor 1 1 Surrogate Recoveries: OC Limits Dibromofluoromethane 96% 86% Toluene-ds 93% 78% 4-Bromofluorobenzene 91% 79% F1-010418- F1-010418-	n-Hexane	ND	ND	40	
Surrogate Recoveries: QC Limits Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418- F1-010418-	n-Heptane	ND	ND	40	
Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418- F1-010418-	Dilution Factor	1	1		
Dibromofluoromethane 96% 86% 60 - 140 Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418- F1-010418-	Surrogate Recoveries:			<u>QC Li</u>	<u>mits</u>
Toluene-ds 93% 78% 60 - 140 4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418- F1-010418-		96%	86%		
4-Bromofluorobenzene 91% 79% 60 - 140 F1-010418- F1-010418-				60 - 1	40
		F1-010418-	F1-010418-		

ND= Value less than reporting limit

J = Value below reporting limit but above MDL

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client: Parsons Report date: 1/7/2019
Client Address: 100 W. Walnut Street Jones Ref. No.: ST-13162

Pasadena, CA 91124

Attn: Justin King Date Sampled: 1/3/2019

Reseda High School PEA

Date Received: 1/3/2019

Date Analyzed: 1/4/2019

Project:Reseda High School PEADate Analyzed:1/4/2019Project Address:18230 Kittridge StreetPhysical State:Soil Gas

Reseda, CA

EPA 8260B - Volatile Organics by GC/MS + Oxygenates

Batch ID:	F1-0104	18-01				
Jones ID:	010418-F1LCS1	010418-F1LCSD1		01	0418-F1CC	V1
	LCS	LCSD		Acceptability		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)	<u>CCV</u>	Range (%)
Vinyl chloride	115%	114%	0.7%	60 - 140	106%	80 - 120
1,1-Dichloroethene	104%	104%	0.1%	60 - 140	103%	80 - 120
Cis-1,2-Dichloroethene	106%	105%	0.9%	70 - 130	104%	80 - 120
1,1,1-Trichloroethane	107%	105%	1.6%	70 - 130	104%	80 - 120
Benzene	116%	115%	0.8%	70 - 130	113%	80 - 120
Trichloroethene	116%	116%	0.1%	70 - 130	114%	80 - 120
Toluene	120%	118%	1.5%	70 - 130	116%	80 - 120
Tetrachloroethene	119%	117%	1.2%	70 - 130	114%	80 - 120
Chlorobenzene	117%	115%	2.0%	70 - 130	115%	80 - 120
Ethylbenzene	110%	110%	0.8%	70 - 130	109%	80 - 120
1,2,4 Trimethylbenzene	107%	105%	2.5%	70 - 130	107%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	104%	103%		60 - 140	99%	60 - 140
Toluene-d ₈	98%	97%		60 - 140	94%	60 - 140
4-Bromofluorobenzene	105%	106%		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%



11007 Forest Pl. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Air Chain-of-Custody Record

Client					Date							Jon	es Pro	ject#		
Paleson >					01-03		_	Purge Rate	e:	cc/n	nin	(F-13	167		
Peseda Hian scr Project Address	nour PE	A			Client Project	+		Shut In Tes	t: Y	/ N		Pag				
18230 Kitheldas													108	2		
Reseda, cA					Turn Around Requested:			acer:		Purge Nu						
Email CST					Imm	_	n-pentane		□ 1 F		Ana	Reques				
Phone		H			Rush: 24hr 48hr			Helium		☐ 3 F	νV	4		(in/H 2O)	0	
Report To	Sampler				72hr	96hr				10	PV			ding	ainers	
Justin king	And)			Norm	al								ic Rea	Cont	
Sample ID	Date Collected	Purge Number	Purge Volume	Labora	atory Sample ID	Canister ID	Canister Start Vacuum	Canister End Vacuum	Flow Rate (cc/min)	Sampling Start Time	Samplin End Tim		8260B	Magnehelic Reading (in/H	Number of Containers	
A0C4-SUI6-5'	1-3-19	3	2810	51-13162-01		B2458	-30	-4	200	0741	015		X	_	1	
19014-8416-15	1-3-19	3	2980	51-1311	2-02	B2443	-30	-5	200	0741	0148	5	X		1	
AUC4 8VI10-12, DUP	1-3-19	3	2980	61-131		B2453	-30	-5	200	0141	0748	5	X		1	
AUC4-8V17-5'	1-3-19	3	2810	ST- 13	162-04	01179	-30	-5	2004	0359	080	7	X		1	
HOL4-8V17-15	1-3-19	3	2980	ST-131	62-05	B2442	-32	-5	200	0800	0807		×		1	
AOCA 8V12-5'	1-3-19	3	1630	ST-1311	62-06	1498	225	-5	200	0813	082	1	X		1	
AOC4 - 8V12 - 15	1-3-19	3	1790	ST - 13	162-07	151313	-30	-5	200	0812	082	1	x		1	
MOCA-845-5'	1-3-19	3	1630	ST- 131L	02-08	B2423	-30	-5	200	0825	0832	9	X		1	
ADCA-8V5-15	1-3-19	3	1790	51-131	62-69	B2420	-28	-5	100	0820	0837	2	X		1	
AOC4-8V10-5'	1-3.19	3	1030	57-1316	2-10	B2430	-30	-5	200	1532	1539		X		1	
Relinquished By (Signature):			Date: 1-3-19		Recieved By (Signa	iture):		75	Date:							
Company Parson S			Time: 1600	1	Company TE				Time:			The delivery of samples and the nature on this Chain of Custody form				
Relinquished By (Signature): Date:			Recieved By Laboratory (Signature): Date:						constitutes authorization to perform the analyses specificied above under the Terms and Conditions set forth							
Company			Time:	(Company 11 c	 f 12			Time:			rerms and	Condition	s set fort	n	



11007 Forest Pl. Santa Fe Springs, CA 90670 (714) 449-9937 Fax (714) 449-9685 www.jonesenv.com

Air Chain-of-Custody Record

Project Name		Date	1		Purge Rate	e:	cc/n	nin	Jones Project #						
Project Address 18230 Kittle	MOUR P	EA				Shut In Test: Y / N				Page 2 Of Z					
Phone Report To Sampler TWATH KING Purge Purge					Turn Around Requested: Immediate Attention Rush: 24hr 48hr 72hr 96hr Normal		Tracer: n-pentane Helium			Purge Number: 1 PV 3 PV 7 PV 10 PV		Anal	ysis R	Magnehelic Reading (in/H 2O)	Number of Containers
Sample ID	Date Collected	Purge Number	Purge Volume	Labora	atory Sample ID	Canister ID	Canister Start Vacuum	Canister End Vacuum	Flow Rate (cc/min)	Sampling Start Time	Sampling End Time	TO-15	8260B	Magnehe	Number of
MOC4-8V10-15'	1-3-19	3	1790	ST-131	62-11	1035	-28	-4	200	1533	1238		K		(
1-3-14				Recieved By (Signate Company Recieved By Laborate Company 12 of		Date: 1 - 3 - 1 Time: Date: Time:		Th signatu constitution analy		e delivery of samples and tre on this Chain of Custo utes authorization to perfe ses specificied above und rms and Conditions set fo			ly form rm the er the		