



Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Edmund G. Brown Jr.
Governor

May 11, 2016

Robert Laughton, LEED AP
Director, Environmental Health and Safety
Los Angeles Unified School District
333 South Beaudry Avenue, Floor 21
Los Angeles, CA 90017

RESULTS OF SOIL SAMPLING AT MAYWOOD SCHOOL, 5200 CUDAHY AVENUE, MAYWOOD, CALIFORNIA 90270; EXPANDED AREA SCHOOL SCH-12

Dear Mr. Laughton,

Enclosed with this letter are the results of the soil sampling conducted at 11 Los Angeles County Unified School District Schools. This letter is specific to Maywood School (Expanded Area School SCH-12) located at 5200 Cudahy Avenue, Maywood, California (Property). Avocet Environmental, Incorporated (Avocet) conducted that soil sampling on July 7, 2015 in accordance with the DTSC-approved sampling work plan dated July 26, 2014. The laboratory results of analysis for lead in soils collected on the Property did not reveal concentrations above 80 parts-per-million; the Department's current level of concern. Based on the laboratory results, additional soil sampling and/or cleanup are not warranted for the Property.

If you have any questions regarding this letter, please contact me at (916) 255-3630 or at Peter.Ruttan@dtsc.ca.gov.

Sincerely

Peter Ruttan Project Manager

Legacy Landfills Office

Attachments (3)

cc: (via email)

Mr. Pat Schanen, LAUSD Mr. Bill Piazza, LAUSD

<sup>&</sup>lt;sup>1</sup> Advanced GeoServices Corporation; "Addendum to the November 15, 2013 Work Plan for Off-site Soil Sampling", July 26, 2014.

# **ATTACHMENT 1**

July 2015 Soil Sampling Field Activities Report Los Angeles Unified School District Schools

July 31, 2015



July 31, 2015 2013-3007-09

Pat Schanen, Environmental Health Manager Office of Environmental Health and Safety Los Angeles Unified School District 333 South Beaudry Avenue, 28<sup>th</sup> Floor Los Angeles, CA 90017

RE: Revised Report on LAUSD K-12 School Sampling
Select Areas of Maywood, Huntington Park and Los Angeles, California

beleet rifeus of Way wood, Huntington I ark and Los ringeles, Camo

Dear Mr. Schanen:

Enclosed is a revised report on the school sampling that Advanced GeoServices performed on behalf of Exide Technologies. The comments that you provided on the report dated July 23 have been incorporated, and a revised table and report is attached. This report is also being provided to the California Department of Toxic Substances Control.

If you have any further questions, please contact me at 610-840-9145 or by email at bforslund@advancedgeoservices.com.

Respectfully submitted,

ADVANCED GEOSERVICES CORP.

Barbara L. Forslund

Consultant

BLF:vm

cc: Peter Ruttan, DTSC

Eileen Ma, LAUSD Jay Golida, LAUSD

Paul Straman, Advanced GeoServices

Fred Ganster, Exide John Hogart, Exide Tom Strang, Exide

Randy Visser, Sheppard Mullin

### EXIDE VERNON 2014 - 2015 Residential Soil Sampling

Lead Results

Sample Location(s): SCH-06 through SCH 10

Sample Date: 7/6/2015

Sample Depth	SCH-06	SCH-07	SCH-08	SCH-09	SCH-10
0-1"	29.2	81.7	52.7	68.6	11
1-3"	17	87.3	37.9	70.1	13.8
3-6"	17.6	81.5	47.6	112	13.1
6-12"	43.6	66.4	75.6	52.6	16.2
12-18"	13.6	17.1	25.8	29.9	10.2

Samples are composites

All lead results reported in mg/kg

Sample Location(s): SCH-11 through SCH 16

Sample Date: 7/7/2015

Sample Depth	SCH-11	SCH-12	SCH-13	SCH-14	SCH-15	SCH-16
0-1"	155	12.4	88.1	31.3	43.1	39.5
1-3"	207	19	74.8	19.4	52.2	42.1
3-6"	44.6	28	70.4	17.7	33.4	70.7
6-12"	43.6	27.1	45.3	16.5	23.5	48
12-18"	15.6	12.7	22.1	19.4	16.6	18.4

Samples are composites

All lead results reported in mg/kg

NOTE: Sample locations SCH-01 through SCH-05 are at private schools not owned by LAUSD





July 30, 2015 Project No. 1325.007

Ms. Barbara Forslund, P.E. ADVANCED GEOSERVICES CORP. 1055 Andrew Drive, Suite A West Chester, Pennsylvania 19380

### July 2015 Soil Sampling Field Activities Report Los Angeles Unified School District Schools

Los Angeles County, California

Dear Ms. Forslund:

This letter report documents the soil sampling procedures at 11 Los Angeles Unified School District (LAUSD) schools on July 6 and 7, 2015. The work described herein was performed in association with the Exide Technologies offsite subsurface soil sampling program, which has analyzed lead concentrations on private and public properties throughout many parts of East Los Angeles, Maywood, Huntington Park, and the surrounding communities. Specifics regarding the names and addresses of the individual schools, among other details, are summarized in Table 1. A site vicinity map identifying the locations of the schools is included as Figure 1.

#### REGULATORY OVERSIGHT

Access to the school properties was made possible by Mr. Bill Piazza, LAUSD's environmental assessment coordinator. Mr. Piazza also managed interactions with school personnel and provided general site supervision on behalf of the LAUSD. Regulatory oversight and public relations were provided by Mr. Peter Ruttan of the California Department of Toxic Substances Control (DTSC). Mr. Piazza and Mr. Ruttan observed the sampling crew at each school to verify the suitability of sample locations and to ensure proper sampling protocol in accordance with Advanced GeoServices Corp.'s (AGC's) November 15, 2013 Work Plan and its July 26, 2014 Addendum.

#### FIELD METHODS

Avocet was retained by AGC to complete a composite soil sampling program that involved the collection of discrete soil samples from the approximate depths of 1, 3, 6, 12, and 18 inches below ground surface (bgs) at five unique boring locations at each school. For every school, five composite samples, one from each depth interval, were prepared and submitted for chemical analysis. The samples were collected from grassy play areas, sports fields, or other common areas where students are likely to come into contact with exposed soil. For properties with limited exposed soil or where the playground is predominantly asphalt, samples were collected inside of tree wells. The approximate locations of the soil samples collected at each of the schools are illustrated in Figures 2 through 12.

Representative soil samples were collected at depth using either a freshly decontaminated trowel or hand auger. The soil was transferred directly into plastic bags that were then sealed and labeled as discrete samples with the sample identification code, date, and the time at which the sample was collected. Each shallow boring was backfilled upon completion with soil cuttings, tamped for light compaction, and topped with planting soil to match grade. Sampling tools were decontaminated between each boring by washing with laboratory-grade, phosphate-free detergent and then rinsed using deionized water. Fresh nitrile gloves were donned by field personnel between each boring and as necessary to prevent cross-contamination between soil samples.

The composite samples submitted for laboratory analysis were collected by measuring equal volumes of soil from each of the five discrete soil samples collected at a given depth throughout the school and then combined and thoroughly mixed in a sealed plastic bag. An aliquot of the mixed composite sample was then transferred into a sterile plastic bag that was sealed, labeled, placed in a cooler, and delivered to the analytical laboratory that same day. In all, five composite samples were collected from each school for laboratory testing, one for each depth interval listed above.

The composite soil samples were submitted, under appropriate chain-of-custody procedures, to Eurofins Calscience, a certified environmental laboratory located in Garden Grove, California, for analysis for lead using U.S. Environmental Protection Agency (EPA) Method 6010B. The remaining discrete soil samples were placed in a labeled container at Exide pending possible future analysis.

In addition to the soil samples, two equipment blank samples, one at the end of each work day, were collected by capturing analytical laboratory-provided water poured across a previously decontaminated hand trowel. The equipment blank samples were also analyzed for lead using EPA Method 6010B.

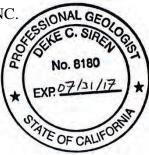
It should be noted that one discrete sample from the 18-inch depth interval (Location 5D) at Eastman Avenue Elementary School could not be collected due to tree roots. Therefore, the composite sample from the 18-inch depth interval (SCH-11-18) is comprised of equal volumes of soil from four rather than five discrete sample locations.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Deke Siren, P.G. Project Manager

DCS:sh
Attachments





# **Tables**



# Table 1 List of LAUSD Schools Sampled

Los Angeles County, California

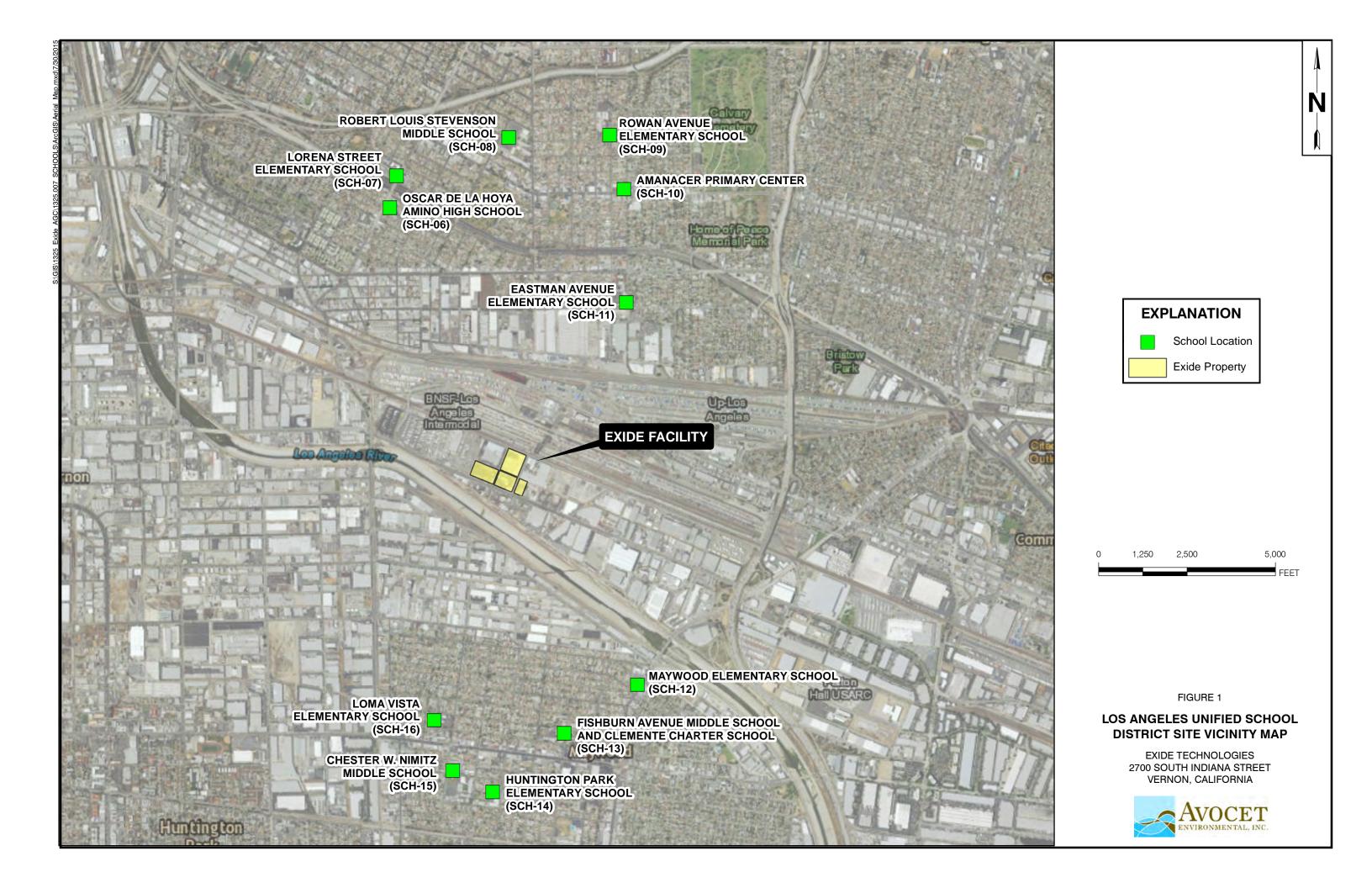
School ID (for sampling purposes)	School Name	Address	Date Sampled	Number of Samples
SCH-06	Oscar De La Hoya Animo High School	1114 South Lorena Street Los Angeles, CA 90023	07/06/15	5
SCH-07	Lorena Street School	1015 South Lorena Street Los Angeles, CA 90023	07/06/15	5
SCH-08	Robert Louis Stevenson Middle School	725 South Indiana Street Los Angeles, CA 90023	07/06/15	5
SCH-09	Rowan Avenue School	600 South Rowan Avenue Los Angeles, CA 90023	07/06/15	5
SCH-10	Amanecer Primary Center	832 South Eastman Avenue Los Angeles, CA 90023	07/06/15	5
SCH-11	Eastman Avenue School	4112 East Olympic Boulevard Los Angeles, CA 90023	07/07/15	5
SCH-12	Maywood School	5200 Cudahy Avenue Maywood, CA 90270	07/07/15	5
SCH-13	Fishburn Avenue Middle School and Clemente Charter	5701 Fishburn Avenue Maywood, CA 90270	07/07/15	5
SCH-14	Huntington Park School	6055 Corona Avenue Huntington Park, CA 90255	07/07/15	5
SCH-15	Chester W. Nimitz Middle School	6021 Carmelita Avenue Huntington Park, CA 90255	07/07/15	5
SCH-16	Loma Vista	3629 East 58 <sup>th</sup> Street Maywood, CA 90270	07/07/15	5

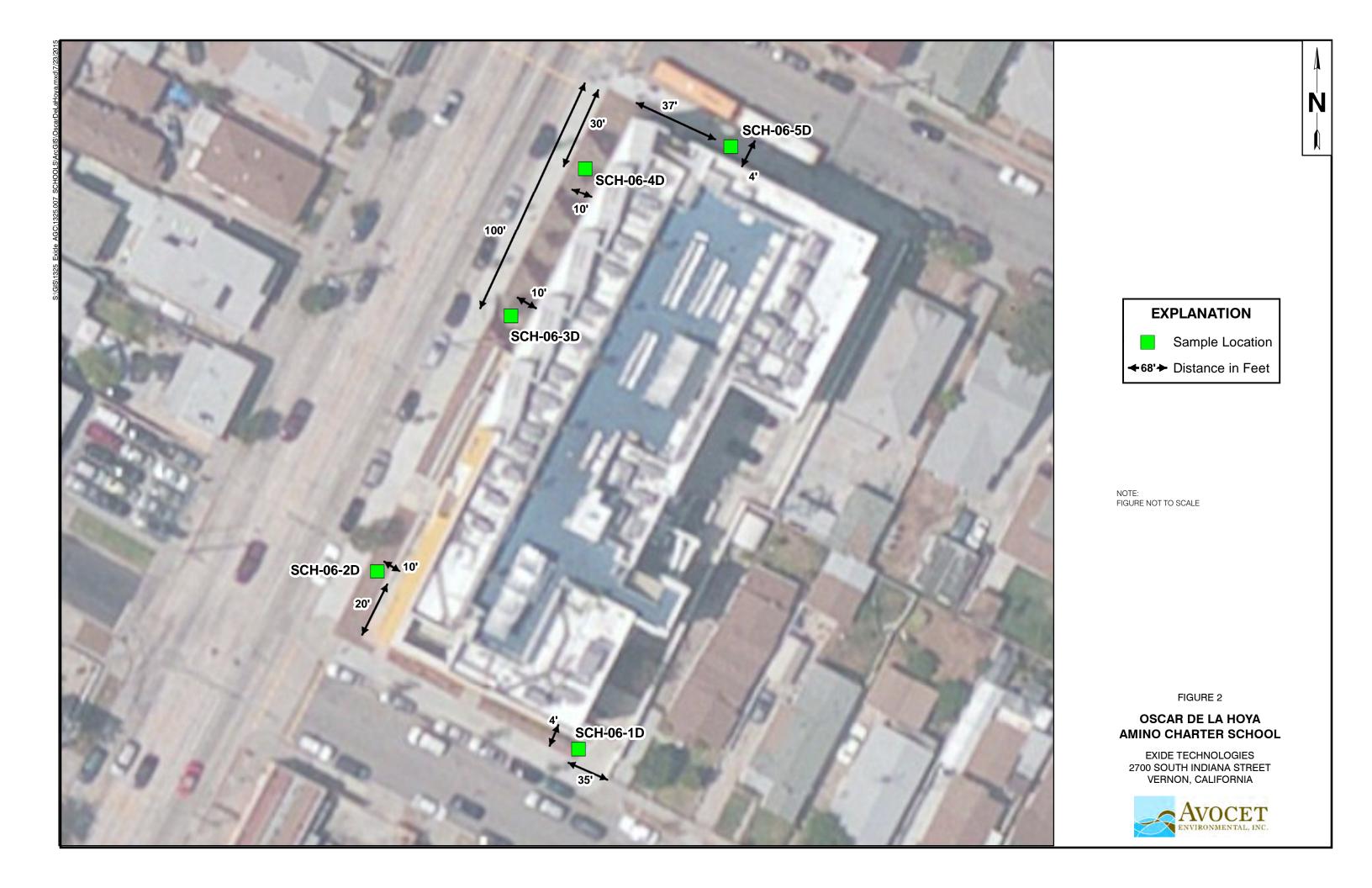
Note: School IDs SCH-01 through SCH-05 are for schools not owned by LAUSD

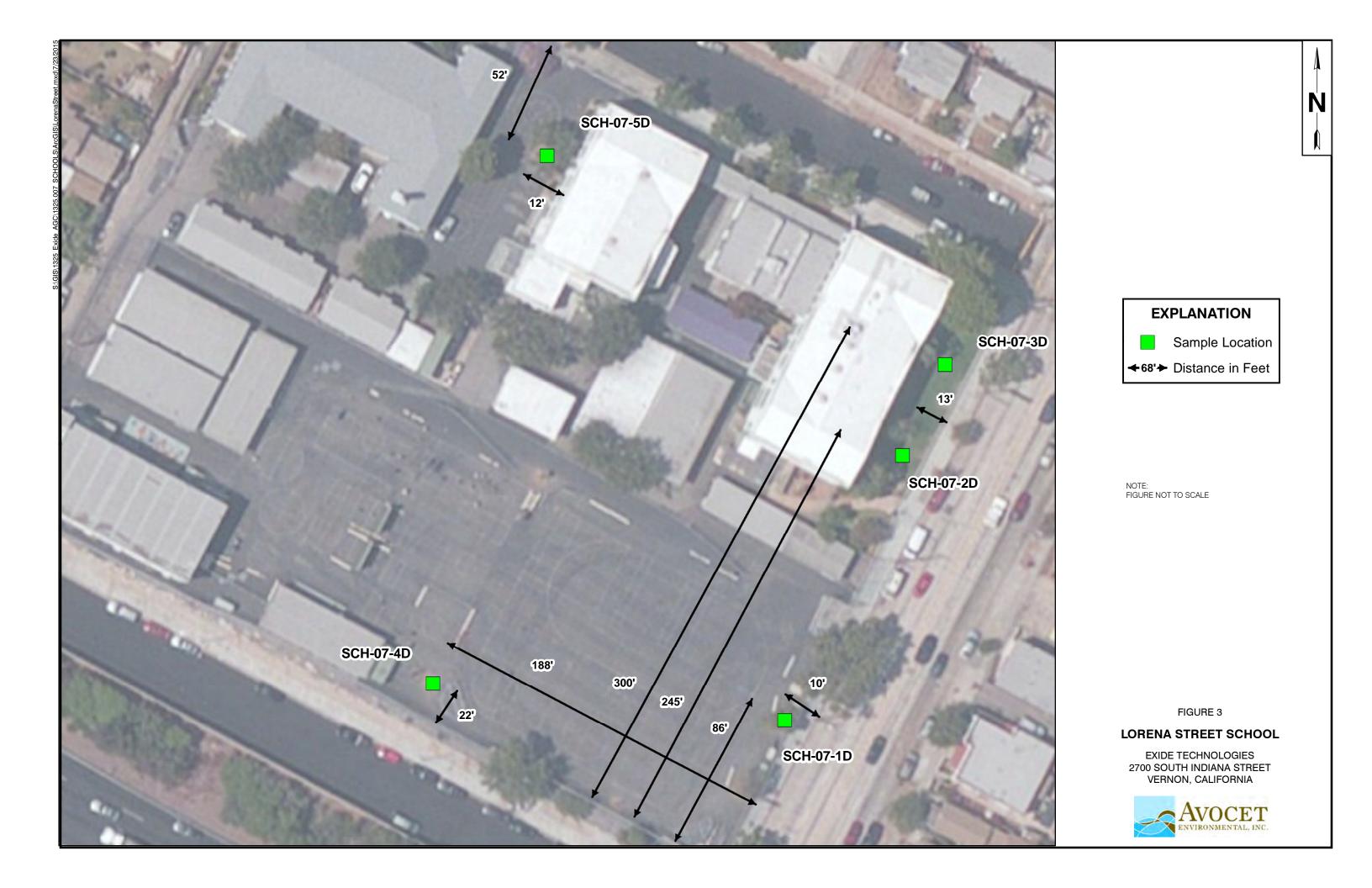


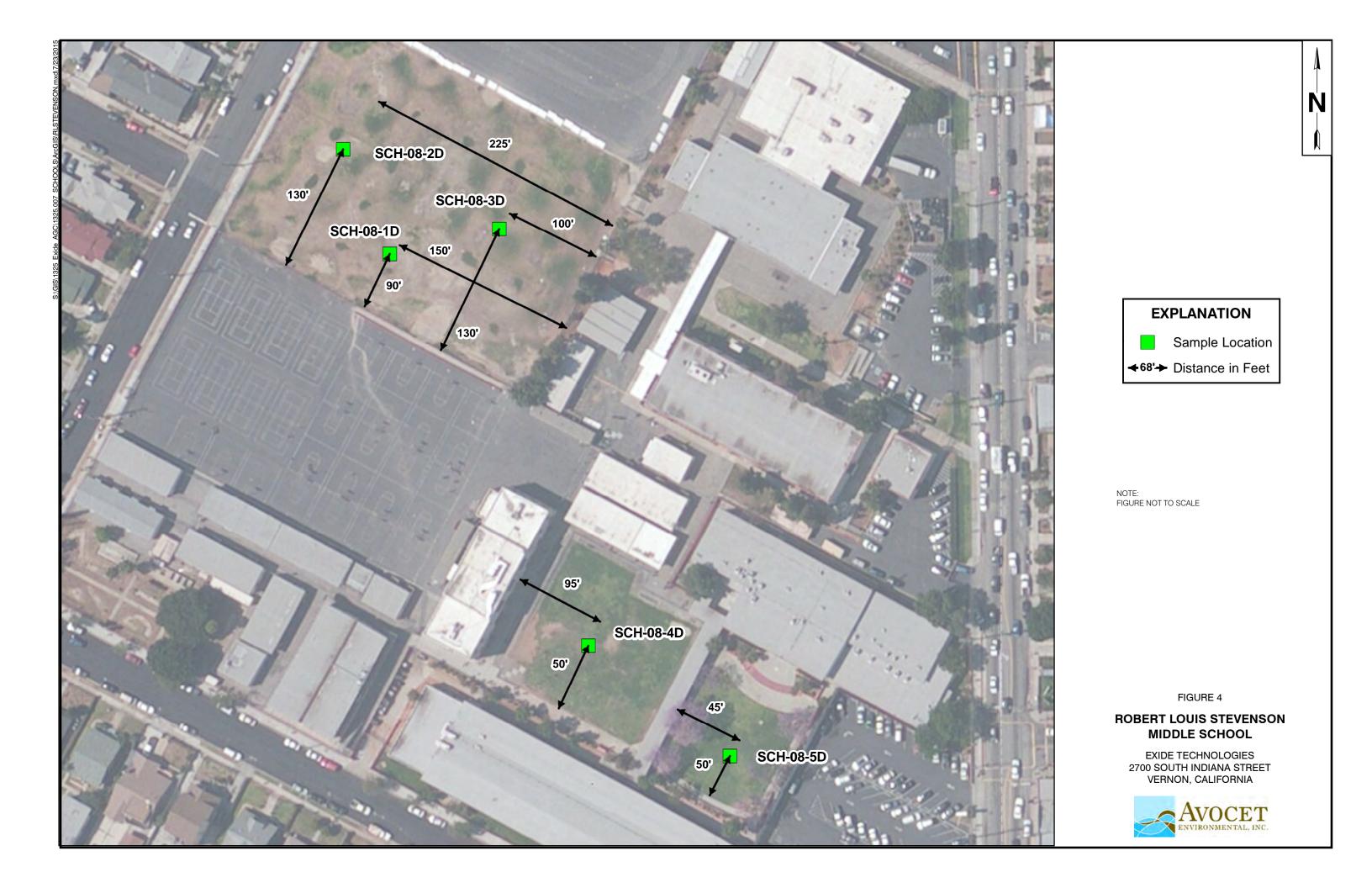
# **Figures**

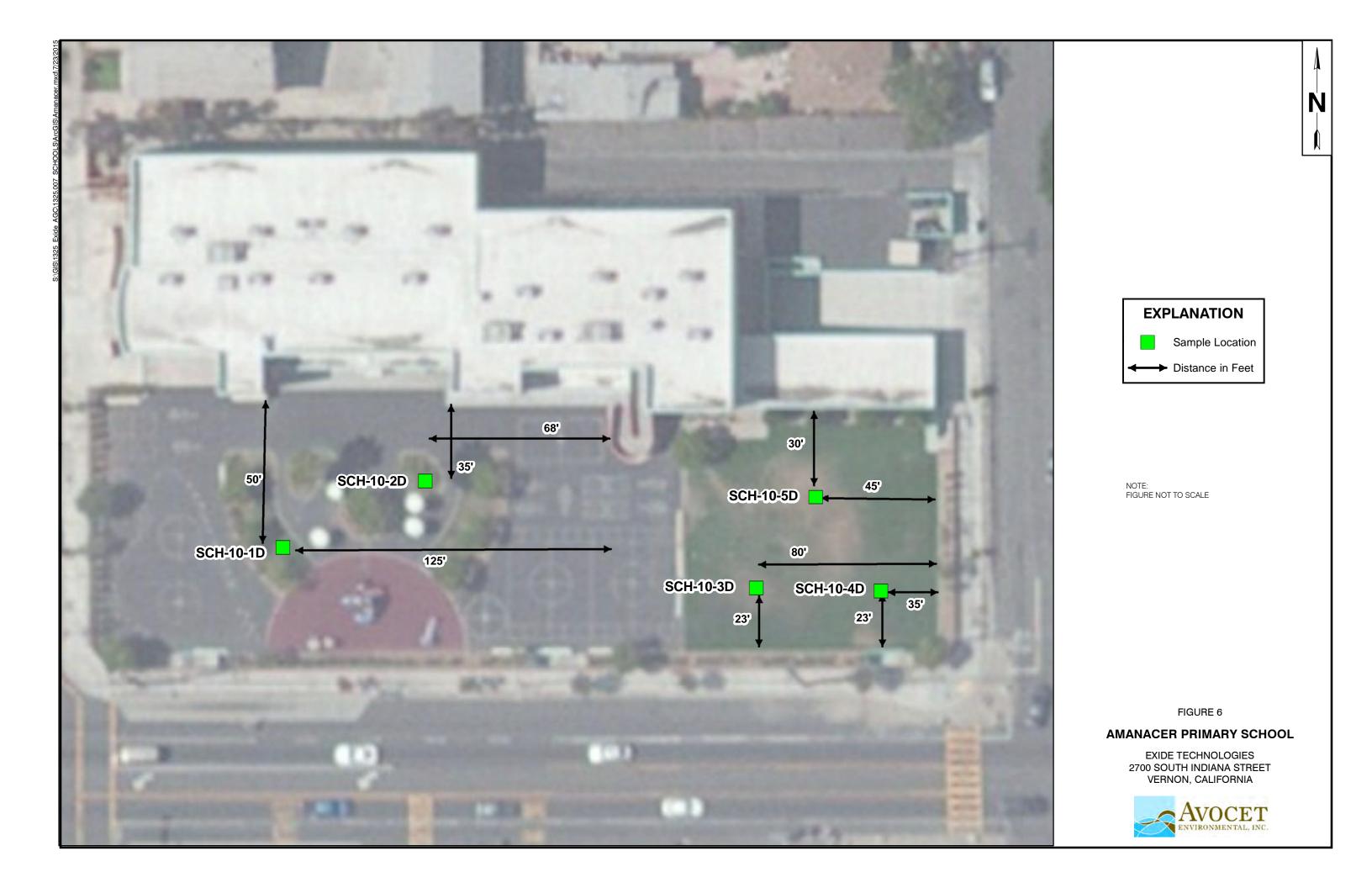


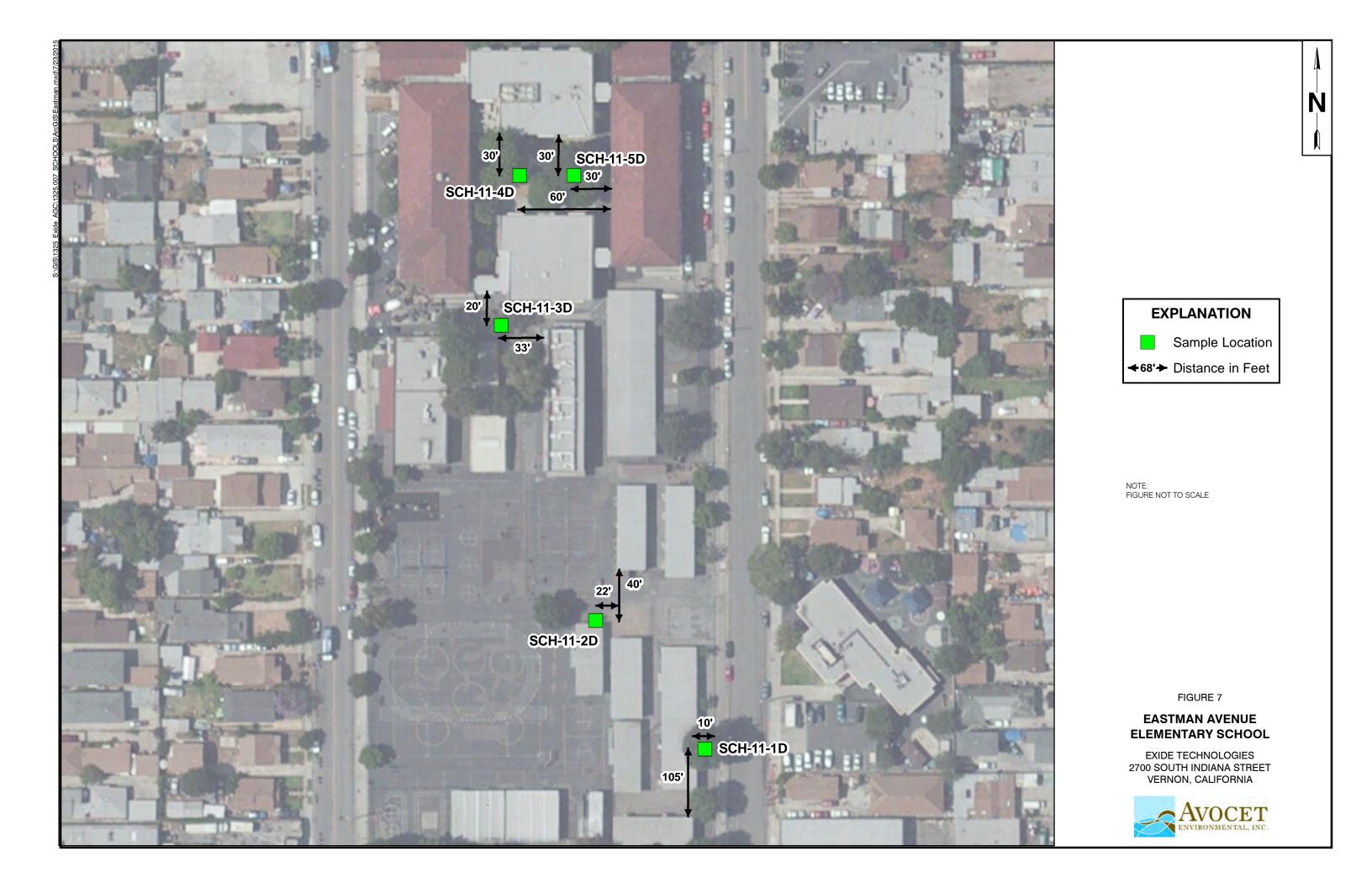


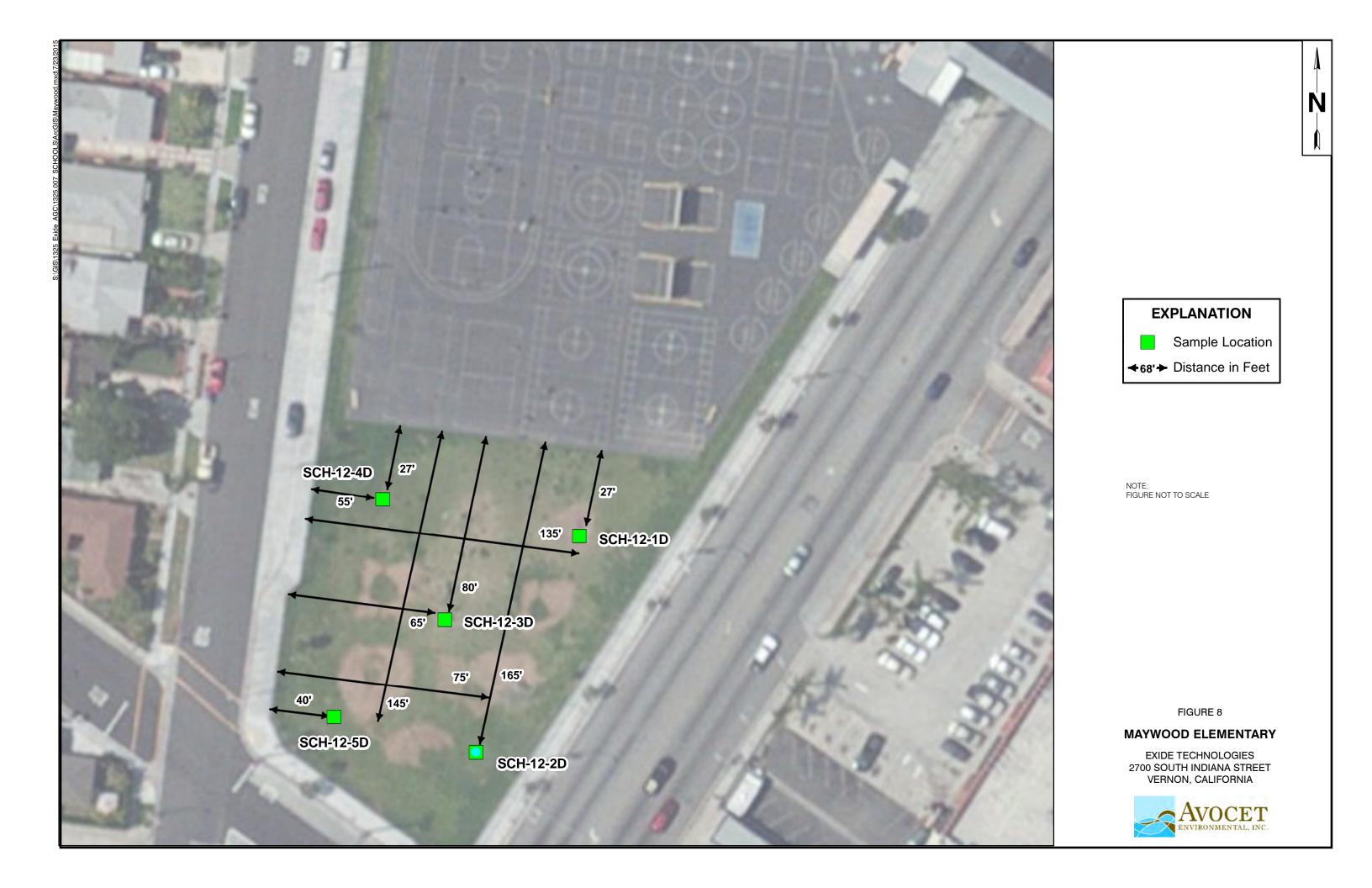












# **EXPLANATION**

Sample Location

←68'→ Distance in Feet

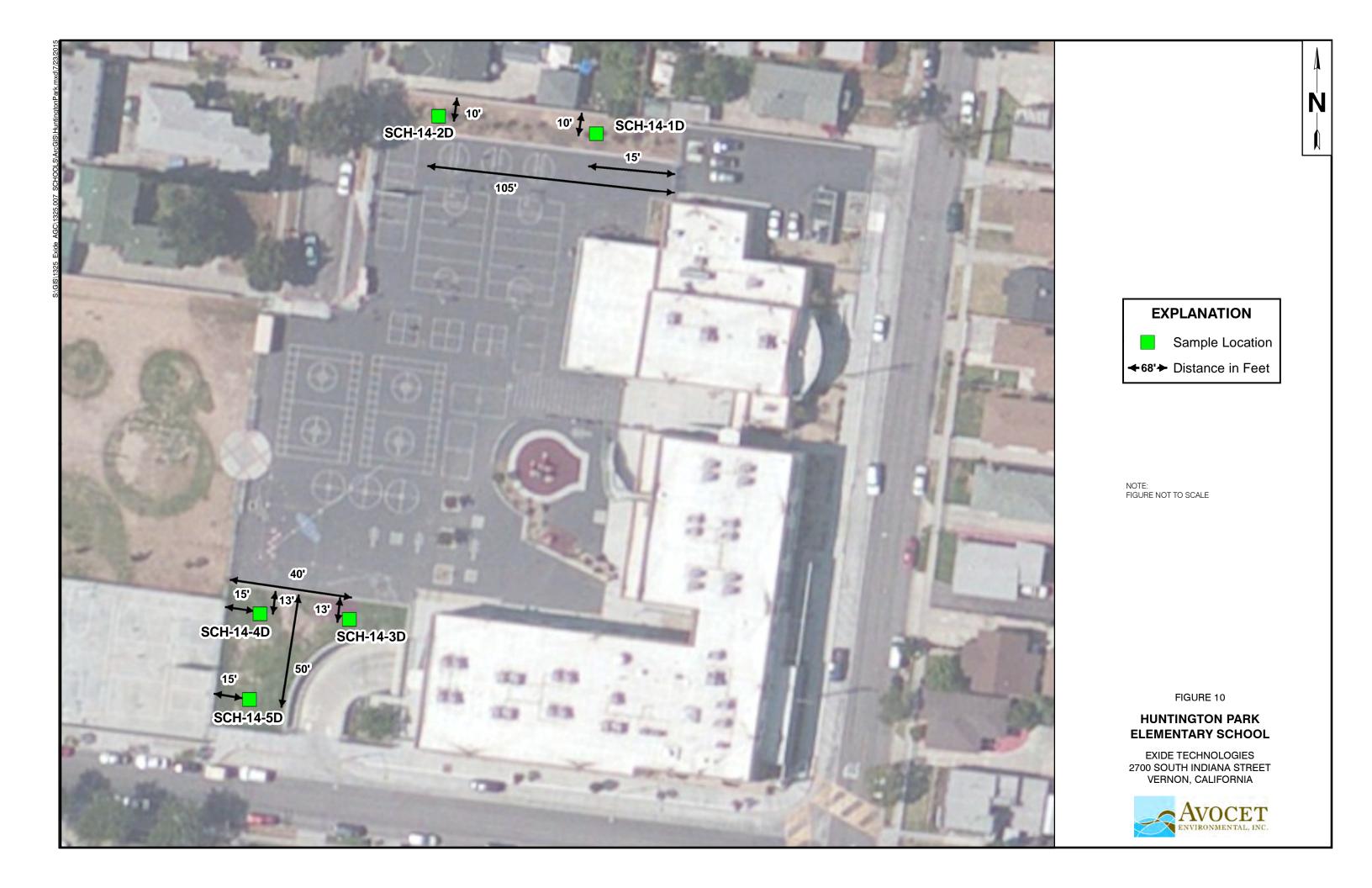
NOTE: FIGURE NOT TO SCALE

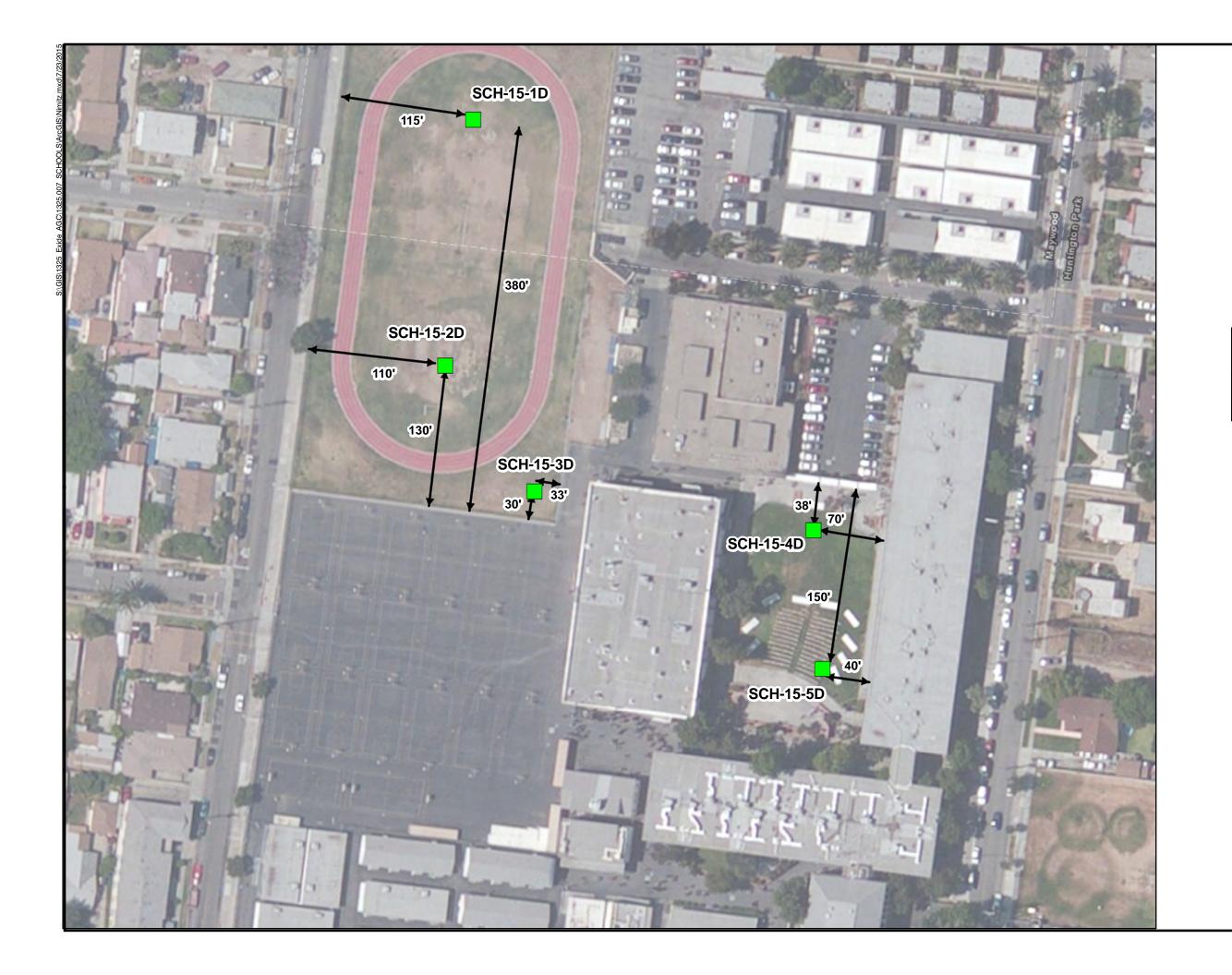
FIGURE 9

# FISHBURN AVENUE MIDDLE SCHOOL AND CLEMENTE CHARTER SCHOOL

EXIDE TECHNOLOGIES 2700 SOUTH INDIANA STREET VERNON, CALIFORNIA







# **EXPLANATION**

Sample Location

**←68'** Distance in Feet

NOTE: FIGURE NOT TO SCALE

FIGURE 11

## **CHESTER W. NIMITZ** MIDDLE SCHOOL

EXIDE TECHNOLOGIES 2700 SOUTH INDIANA STREET VERNON, CALIFORNIA





# Calscience



# **WORK ORDER NUMBER: 15-07-0228**

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

**Client:** Advanced GeoServices Corporation

Client Project Name: Exide Vernon Offsite / 2013-3007-09

**Attention:** Adam Doubleday

1055 Andrew Drive, Suite A West Chester, PA 19380-4293

amande Porter

Approved for release on 07/20/2015 by: Amanda Porter

**Project Manager** 



Email your PM >

ResultLink >

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



# **Contents**

Client Project Name: Exide Vernon Offsite / 2013-3007
---

Work Order Number: 15-07-0228

Work Ora	10 07 0220	
1	Work Order Narrative	3
2	Client Sample Data	4
3	Quality Control Sample Data3.1 MS/MSD3.2 LCS/LCSD	8 8 10
4	Sample Analysis Summary	12
5	Glossary of Terms and Qualifiers	13
6	Chain-of-Custody/Sample Receipt Form	14



#### **Work Order Narrative**

Work Order: 15-07-0228 Page 1 of 1

#### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 07/06/15. They were assigned to Work Order 15-07-0228.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

#### **Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

#### **Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

#### **Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

#### **Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



Advanced GeoServices Corpo	ration		Date Re	eceived:			07/06/15
1055 Andrew Drive, Suite A			Work O	15-07-0228			
West Chester, PA 19380-4293	}		Prepara	tion:			EPA 3050B
,			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite /	2013-3007-09					Pa	age 1 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-06-01	15-07-0228-1-A	07/06/15 08:40	Solid	ICP 7300	07/08/15	07/10/15 00:42	150708L03
<u>Parameter</u>		Result		RL	<u>DF</u>	Qu	alifiers
Lead		29.2		0.478	0.957		
SCH-06-03	15-07-0228-2-A	07/06/15 08:43	Solid	ICP 7300	07/08/15	07/10/15 00:45	150708L03
<u>Parameter</u>		Result		RL	<u>DF</u>	Qu	alifiers
Lead		17.0		0.481	0.962		
SCH-06-06	15-07-0228-3-A	07/06/15 08:46	Solid	ICP 7300	07/08/15	07/10/15 00:45	150708L03
Parameter	·	Result	-	<u>RL</u>	<u>DF</u>	Qu	alifiers
Lead		17.6		0.521	1.04		
SCH-06-12	15-07-0228-4-A	07/06/15 08:49	Solid	ICP 7300	07/08/15	07/10/15 00:46	150708L03
<u>Parameter</u>		Result		RL	DF	Qu	alifiers
Lead		43.6		0.483	0.966		
SCH-06-18	15-07-0228-5-A	07/06/15 08:52	Solid	ICP 7300	07/08/15	07/10/15 00:47	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	<u>Qu</u>	<u>alifiers</u>
Lead		13.6		0.493	0.985		
SCH-07-01	15-07-0228-6-A	07/06/15 09:50	Solid	ICP 7300	07/08/15	07/10/15 00:48	150708L03
<u>Parameter</u>		Result	-	RL	<u>DF</u>	Qu	alifiers
Lead		81.7		0.500	1.00		
SCH-07-03	15-07-0228-7-A	07/06/15 09:53	Solid	ICP 7300	07/08/15	07/10/15 00:48	150708L03
<u>Parameter</u>		Result		RL	<u>DF</u>	Qu	alifiers
Lead		87.3		0.518	1.04		
SCH-07-06	15-07-0228-8-A	07/06/15 09:56	Solid	ICP 7300	07/08/15	07/10/15 00:49	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qu	<u>alifiers</u>
Lead		81.5		0.498	0.995		



Advanced GeoServices Corporation	1		Date Re	eceived:			07/06/15
1055 Andrew Drive, Suite A	Work Order:				15-07-0228		
West Chester, PA 19380-4293			Prepara	tion:			EPA 3050B
			Method:	:			EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 2013	3-3007-09					Pa	age 2 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-07-12	15-07-0228-9-A	07/06/15 09:58	Solid	ICP 7300	07/08/15	07/10/15 00:50	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		66.4		0.505	1.01		
SCH-07-18	15-07-0228-10-A	07/06/15 10:05	Solid	ICP 7300	07/08/15	07/10/15 00:50	150708L03
Parameter		Result		<u>RL</u>	DF	Qua	alifiers
Lead		17.1		0.510	1.02		
SCH-08-01	15-07-0228-11-A	07/06/15 11:00	Solid	ICP 7300	07/08/15	07/10/15 00:51	150708L03
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		52.7		0.483	0.966		
SCH-08-03	15-07-0228-12-A	07/06/15 11:04	Solid	ICP 7300	07/08/15	07/10/15 00:54	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		37.9		0.515	1.03		
SCH-08-06	15-07-0228-13-A	07/06/15 11:08	Solid	ICP 7300	07/08/15	07/10/15 00:55	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		47.6		0.508	1.02		
SCH-08-12	15-07-0228-14-A	07/06/15 11:12	Solid	ICP 7300	07/08/15	07/10/15 00:55	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		75.6		0.521	1.04		
SCH-08-18	15-07-0228-15-A	07/06/15 11:16	Solid	ICP 7300	07/08/15	07/10/15 00:56	150708L03
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		25.8		0.524	1.05		
SCH-09-01	15-07-0228-16-A	07/06/15 13:10	Solid	ICP 7300	07/08/15	07/10/15 00:57	150708L03
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		68.6		0.510	1.02		



Advanced GeoServices Corporation	on		Date Re	eceived:			07/06/15
1055 Andrew Drive, Suite A			Work Order:				
West Chester, PA 19380-4293			Prepara	tion:			EPA 3050B
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 20	13-3007-09					Pa	age 3 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-09-03	15-07-0228-17-A	07/06/15 13:14	Solid	ICP 7300	07/08/15	07/10/15 00:57	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		70.1		0.500	1.00		
SCH-09-06	15-07-0228-18-A	07/06/15 13:18	Solid	ICP 7300	07/08/15	07/10/15 00:58	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		112		0.500	1.00		
SCH-09-12	15-07-0228-19-A	07/06/15 13:22	Solid	ICP 7300	07/08/15	07/10/15 00:59	150708L03
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		52.6		0.510	1.02		
SCH-09-18	15-07-0228-20-A	07/06/15 13:26	Solid	ICP 7300	07/08/15	07/10/15 00:59	150708L03
<u>Parameter</u>		Result		RL	DF	Qua	<u>alifiers</u>
Lead		29.9		0.521	1.04		
SCH-10-01	15-07-0228-21-A	07/06/15 14:25	Solid	ICP 7300	07/08/15	07/10/15 01:00	150708L04
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		11.0		0.485	0.971		
SCH-10-03	15-07-0228-22-A	07/06/15 14:28	Solid	ICP 7300	07/08/15	07/10/15 18:14	150708L04
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		13.8		0.493	0.985		
SCH-10-06	15-07-0228-23-A	07/06/15 14:32	Solid	ICP 7300	07/08/15	07/10/15 18:16	150708L04
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		13.1		0.478	0.957		
SCH-10-12	15-07-0228-24-A	07/06/15 14:35	Solid	ICP 7300	07/08/15	07/10/15 18:18	150708L04
Parameter		Result	_	<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		16.2		0.498	0.995		



Advanced GeoServices Corporation

Date Received: 07/06/15

1055 Andrew Drive, Suite A

Work Order: 15-07-0228

West Chester, PA 19380-4293

Preparation: EPA 3050B

Method: EPA 6010B

Units: mg/kg

Project: Exide Vernon Offsite / 2013-3007-09 Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-10-18	15-07-0228-25-A	07/06/15 14:40	Solid	ICP 7300	07/08/15	07/09/15 17:11	150708L04
Parameter		Result	<u> </u>	<u> </u>	<u>DF</u>	Qua	lifiers
Lead		10.2	(	).495	0.990		
Method Blank	097-01-002-21388	N/A	Solid	ICP 7300	07/08/15	07/10/15 13:10	150708L03
Parameter		Result	<u> </u>	<u> </u>	<u>DF</u>	Qua	<u>llifiers</u>
Lead		ND	(	).505	1.01		

Method Blank	097-01-002-21380 N/	A Solid	ICP 7300	07/08/15	07/09/15 17:04	150708L04
<u>Parameter</u>	<u> </u>	esult	<u>RL</u>	<u>DF</u>	Quali	fiers
Lead	1	D	0.500	1.00		





# **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

07/06/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0228

West Chester, PA 19380-4293

Preparation:

EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 1 of 2

Quality Control Sample ID	Туре		Matrix	Instr	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
SCH-06-01	Sample		Solid	ICP	7300	07/08/15	07/10/15	00:42	150708S03	
SCH-06-01	Matrix Spike		Solid	ICP	7300	07/08/15	07/10/15	00:41	150708S03	
SCH-06-01	Matrix Spike D	Ouplicate	Solid	ICP	7300	07/08/15	07/10/15	00:41	150708S03	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	29.24	25.00	48.12	75	46.04	67	75-125	4	0-20	3



### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

07/06/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0228

West Chester, PA 19380-4293

Preparation:

EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 2 of 2

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SCH-10-18	Sample	Solid	ICP 7300	07/08/15	07/09/15 17:11	150708S04
SCH-10-18	Matrix Spike	Solid	ICP 7300	07/08/15	07/09/15 17:08	150708S04
SCH-10-18	Matrix Spike Dup	licate Solid	ICP 7300	07/08/15	07/09/15 17:09	150708S04
Parameter		oike <u>MS</u> dded <u>Conc.</u>	MS MSE Con		%Rec. CL RPD	RPD CL Qualifiers
Lead	10.23 25	5.00 35.37	101 37.1	3 108	75-125 5	0-20





# **Quality Control - LCS**

Advanced GeoServices Corporation

Date Received: 07/06/15

Work Order: 15-07-0228

West Chester, PA 19380-4293

Preparation: EPA 3050B

Method: EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09

Page 1 of 2

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-21388	LCS	Solid	ICP 7300	07/08/15	07/10/15 13:13	150708L03
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec	. CL Qualifiers
Lead		25.00	24.85	99	80-120	)

RPD: Relative Percent Difference. CL: Control Limits



# **Quality Control - LCS**

Advanced GeoServices Corporation

Date Received: 07/06/15

Work Order: 15-07-0228

West Chester, PA 19380-4293

Preparation: EPA 3050B

Method: EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-21380	LCS	Solid	ICP 7300	07/08/15	07/09/15 17:06	150708L04
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec	. CL Qualifiers
Lead		25.00	25.94	104	80-120	)

RPD: Relative Percent Difference. CL: Control Limits





# **Sample Analysis Summary Report**

Work Order: 15-07-0228				Page 1 of 1
<u>Method</u>	<u>Extraction</u>	Chemist ID	<u>Instrument</u>	Analytical Location
EPA 6010B	EPA 3050B	771	ICP 7300	1



# **Glossary of Terms and Qualifiers**

Work Order: 15-07-0228 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
	Greater than the indicated value.
>	
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
В	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.

- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- X % Recovery and/or RPD out-of-range.
- Z Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Date/Time: Date/Time:

Received By:

Received By: Received By:

Relinquished By: Relinquished By:

Relinquished Byz

# ADVANCED GEOSERVICES CORP.

CHAIN OF CUSTODY

Project # 2013-3007-09 Shipment #

15-07-0228 Shipment Tracking # courier pick-up Orop %

Deliverables (circle one) Results only (Results/QC summary) CLP-Like

5-Day 72-Hour 24-Hour

Standard

Turnaround Time (circle one)

Lab Name/Location: Calscience, Garden Grove, CA

Project Name: Exide Vernon Offsite AGC Contact: Adam Doubleday

1055 Andrew Dr. Suite A West Chester, PA 19380 tel 610.840.9100

REMARKS Preservatives Date/Time: 1532 ANALYSIS SEINE 09# 0109 **LEAD** 64 # of Containers Field Filtered C Matrix (O to O) Sample Type Time 2960 886 3958 11:00 1108 1521 5730 728 280 6/18 Date Sample ID SCN-08-06 SCN-08-63 SCH-07-12 SCH-07-18 50-80-NJ いりようどもも SCN-08-01 SCN-07-03 SCH-08-12 SCK-02-0 10,90 -06-17 0,40,20 -06-0 ローソーボ SCN-68 Lab Use Only

Preservative: 1-ice, 2- H<sub>2</sub>SO<sub>4</sub>, 3-HCl, 4-HNO<sub>3</sub>, 5-NaOH, 6-ZnOAC Remarks: EZ - Exclusion Zone Sample Matrix: SW - Surface Water, GW - Groundwater, Sed - Sediment, S - Soil, Sld - Sludge, A - Air PA1325 AGC-Exide\_Vernon007\_Offsite Soil SamplingP

Return to Contents

ADVANCED GEOSERVICES CORP. CHAIN OF CUSTODY

Lab Name/Location: Calscience, Garden Grove, CA

Turnaround Time (circle one)

23

Project Name: Exide Vernon Offsite AGC Contact: Adam Doubleday

1055 Andrew Dr. Suite A West Chester, PA 19380 tel 610.840.9100

Med Date 2 CLP-Like Deliverables (circle one) Results only Results/QC summary Shipment Tracking # courier pick-up Dropped Project # 2013-3007-09 Shipment # Standard 5-Day 72-Hour 24-Hour

REMARKS Preservatives 27 Date/Time: 15:32 Date/Time:\_ Date/Time:\_ ANALYSIS SEINE 09# 0109 **FEAD** Q # of Containers Field Filtered Matrix (O or O)Sample Type 5%.7h/ 25.75 Time Received By:≥ Received By: Received By: 51/90/12 Date Sample ID Relinquished By SCK-10-03 Relinquished By: Relinquished By: Lab Use Only 22

Preservative: 1-ice, 2- H<sub>2</sub>SO<sub>4</sub>, 3-HCl, 4-HNO<sub>3</sub>, 5-NaOH, 6-ZnOAC Remarks: EZ - Exclusion Zone Sample Matrix: SW - Surface Water, GW - Groundwater, Sed - Sediment, S - Soil, Sld - Sludge, A - Air PN1325 AGC-Exide\_VernonN007\_Offsite Soil SamplingPP

Return to Contents

Calscience

Page 16 of 16 WORK ORDER NUMBER: **15-07-** <u>022</u> &

# SAMPLE RECEIPT CHECKLIST

COOLER  $\underline{\mathcal{O}}$  OF  $\underline{\mathcal{O}}$ 

CLIENT: EXIGE	DATI	E: 07 /	6	_ / 2015
TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  Thermometer ID: SC5 (CF:-0.2°C); Temperature (w/o CF): 24-9 °C (w/ CF): 247  □ Sample(s) outside temperature criteria (PM/APM contacted by:)  □ Sample(s) outside temperature criteria but received on ice/chilled on same day of sample (s) received at ambient temperature; placed on ice for transport by courier  Ambient Temperature: □ Air □ Filter	ling	Blank , <b>∠</b> Checke		
CUSTODY SEAL:  Cooler	'A 'A	Checke Checke	d by: <sub>-</sub>	1017
SAMPLE CONDITION:  Chain-of-Custody (COC) document(s) received with samples  COC document(s) received complete  Sampling date Sampling time Matrix Number of containers	••••••	Yes Ø	No	N/A
□ No analysis requested □ Not relinquished □ No relinquished date □ No relinquishe  Sampler's name indicated on COC  Sample container label(s) consistent with COC  Sample container(s) intact and in good condition  Proper containers for analyses requested				
Sufficient volume/mass for analyses requested  Samples received within holding time  Aqueous samples for certain analyses received within 15-minute holding time		Tirend		
□ pH □ Residual Chlorine □ Dissolved Sulfide □ Dissolved Oxygen				<b>d</b>
Container(s) for certain analysis free of headspace  ☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)  ☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)				
Tedlar™ bag(s) free of condensation				)
Aqueous: □ VOA □ VOAh □ VOAna₂ □ 100PJ □ 100PJna₂ □ 125AGB □ 125AGBh □ 125AGBh □ 125PBznna □ 250CGBs □ 250CGBs □ 250PBn □ 500AGB □ 500AGB □ 500PB □ 1AGB □ 1AGBs □ 1PBna □ □ □ □ □ □ □ □   Solid: □ 4ozCGJ □ 8ozCGJ □ 16ozCGJ □ Sleeve □ □ □ EnCores® □ □ □ Terrac   Air: □ Tedlar™ □ Canister □ Sorbent Tube □ PUF □ Other Matrix □   Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Zip   Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, □	500AGJ  Cores® ():   loc/Rese Labeled	□ 500A  □ □  ealable Ba /Checke	AGJs  Z Z ag ed by:	1017
$\mathbf{s} = H_2SO_4$ , $\mathbf{u} = \text{ultra-pure}$ , $\mathbf{znna} = \text{Zn}(CH_3CO_2)_2 + \text{NaOH}$	ŀ	Reviewe	a by:	7.00



# Calscience



# **WORK ORDER NUMBER: 15-07-0294**

The difference is service

ResultLink >

Email your PM >



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

**Client:** Advanced GeoServices Corporation

Client Project Name: Exide Vernon Offsite / 2013-3007-09

**Attention:** Adam Doubleday

1055 Andrew Drive, Suite A West Chester, PA 19380-4293

Amande Porter

Approved for release on 07/21/2015 by: Amanda Porter

Project Manager



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



# **Contents**

Client Project Name: Exide Vernon Offsite / 2013-3007-09	Client Project Name:	Exide Vernon Offsite	/ 2013-3007-09
--	----------------------	----------------------	----------------

Work Order Number: 15-07-0294

1	Work Order Narrative	3
2	Client Sample Data	
3	Quality Control Sample Data.3.1 MS/MSD.3.2 LCS/LCSD.	10 10 13
4	Sample Analysis Summary	16
5	Glossary of Terms and Qualifiers	17
6	Chain-of-Custody/Sample Receipt Form	18



#### **Work Order Narrative**

Work Order: 15-07-0294 Page 1 of 1

#### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 07/07/15. They were assigned to Work Order 15-07-0294.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

#### **Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

#### **Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

#### **Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

#### **Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Sieved samples were processed using #60 sieve prior to analysis.



Advanced GeoServices Corporation	on		Date Re	eceived:			07/07/15
1055 Andrew Drive, Suite A			Work O	15-07-0294			
West Chester, PA 19380-4293			Prepara	EPA 3050B			
			Method:	:			EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 20	13-3007-09					Pa	age 1 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-11-01	15-07-0294-1-A	07/07/15 09:00	Solid	ICP 7300	07/08/15	07/09/15 23:29	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		155		0.500	1.00		
SCH-11-03	15-07-0294-2-A	07/07/15 09:03	Solid	ICP 7300	07/08/15	07/09/15 23:30	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		207		0.508	1.02		
SCH-11-06	15-07-0294-3-A	07/07/15 09:06	Solid	ICP 7300	07/08/15	07/09/15 23:32	150708L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Lead		44.6		0.524	1.05		
SCH-11-12	15-07-0294-4-A	07/07/15 09:09	Solid	ICP 7300	07/08/15	07/09/15 23:33	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		43.6		0.515	1.03		
SCH-11-18	15-07-0294-5-A	07/07/15 09:12	Solid	ICP 7300	07/08/15	07/09/15 23:35	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		15.6		0.513	1.03		
SCH-12-01	15-07-0294-6-A	07/07/15 10:20	Solid	ICP 7300	07/08/15	07/09/15 23:36	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		12.4		0.508	1.02		
SCH-12-03	15-07-0294-7-A	07/07/15 10:25	Solid	ICP 7300	07/08/15	07/09/15 23:41	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		19.0		0.493	0.985		
SCH-12-06	15-07-0294-8-A	07/07/15 10:30	Solid	ICP 7300	07/08/15	07/09/15 23:43	150708L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		28.0		0.526	1.05		



Advanced GeoServices Corporation	on		Date Re	ceived:			07/07/15
1055 Andrew Drive, Suite A			Work O	rder:			15-07-0294
West Chester, PA 19380-4293			Prepara	EPA 3050B			
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 201	3-3007-09					Pa	age 2 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-12-12	15-07-0294-9-A	07/07/15 10:35	Solid	ICP 7300	07/08/15	07/09/15 23:45	150708L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
Lead		27.1		0.500	1.00		
SCH-12-18	15-07-0294-10-A	07/07/15 10:40	Solid	ICP 7300	07/08/15	07/09/15 23:46	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		12.7		0.481	0.962		
SCH-13-01	15-07-0294-11-A	07/07/15 10:55	Solid	ICP 7300	07/08/15	07/09/15 23:48	150708L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Lead		88.1		0.490	0.980		
SCH-13-03	15-07-0294-12-A	07/07/15 11:00	Solid	ICP 7300	07/08/15	07/09/15 23:49	150708L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Lead		74.8		0.526	1.05		
SCH-13-06	15-07-0294-13-A	07/07/15 11:05	Solid	ICP 7300	07/08/15	07/09/15 23:51	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		70.4		0.505	1.01		
SCH-13-12	15-07-0294-14-A	07/07/15 11:10	Solid	ICP 7300	07/08/15	07/09/15 23:53	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		45.3		0.513	1.03		
SCH-13-18	15-07-0294-15-A	07/07/15 11:15	Solid	ICP 7300	07/08/15	07/09/15 23:54	150708L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		22.1		0.500	1.00		
SCH-14-01	15-07-0294-16-A	07/07/15 12:10	Solid	ICP 7300	07/08/15	07/09/15 23:56	150708L01
<u>Parameter</u>		Result	_	<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		31.3		0.488	0.976		



Advanced GeoServices Corporation	on		Date Re	ceived:			07/07/15		
1055 Andrew Drive, Suite A			Work O	rder:			15-07-0294		
West Chester, PA 19380-4293			Preparation:						
			Method:						
			Units:				mg/kg		
Project: Exide Vernon Offsite / 20	13-3007-09					Pa	age 3 of 5		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
SCH-14-03	15-07-0294-17-A	07/07/15 12:14	Solid	ICP 7300	07/08/15	07/10/15 00:01	150708L01		
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers		
Lead		19.4		0.493	0.985				
SCH-14-06	15-07-0294-18-A	07/07/15 12:18	Solid	ICP 7300	07/08/15	07/10/15 00:03	150708L01		
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers		
Lead		17.7		0.513	1.03				
SCH-14-12	15-07-0294-19-A	07/07/15 12:22	Solid	ICP 7300	07/08/15	07/10/15 00:04	150708L01		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers		
Lead		16.5		0.505	1.01				
SCH-14-18	15-07-0294-20-A	07/07/15 12:26	Solid	ICP 7300	07/08/15	07/10/15 00:06	150708L01		
Parameter		Result		RL	DF	<u>Qualifiers</u>			
Lead		19.4		0.518	1.04				
SCH-15-01	15-07-0294-21-A	07/07/15 13:45	Solid	ICP 7300	07/08/15	07/09/15 22:21	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		43.1		0.518	1.04				
SCH-15-03	15-07-0294-22-A	07/07/15 13:50	Solid	ICP 7300	07/08/15	07/10/15 00:26	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		52.2		0.495	0.990				
SCH-15-06	15-07-0294-23-A	07/07/15 13:55	Solid	ICP 7300	07/08/15	07/10/15 00:26	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		33.4		0.526	1.05				
SCH-15-12	15-07-0294-24-A	07/07/15 14:00	Solid	ICP 7300	07/08/15	07/10/15 00:27	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		23.5		0.524	1.05				



Lead

#### **Analytical Report**

Advanced GeoServices Corporate	tion		Date Re	ceived:			07/07/15		
1055 Andrew Drive, Suite A			Work O	rder:			15-07-0294		
West Chester, PA 19380-4293			Prepara		EPA 3050B				
			Method:		EPA 6010B				
			Units: mg/k						
Project: Exide Vernon Offsite / 20	013-3007-09					Pa	ige 4 of 5		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
SCH-15-18	15-07-0294-25-A	07/07/15 14:05	Solid	ICP 7300	07/08/15	07/10/15 00:28	150708L02		
<u>Parameter</u>	·	Result	<u>Ilt RL DF Qualifie</u>			alifiers			
Lead		16.6		0.524	1.05				
SCH-16-01	15-07-0294-26-A	07/07/15 14:45	Solid	ICP 7300	07/08/15	07/10/15 00:28	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers		
Lead		39.5		0.485	0.971				
SCH-16-03	15-07-0294-27-A	07/07/15 14:50	Solid	ICP 7300	07/08/15	07/10/15 00:29	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		42.1		0.495	0.990				
SCH-16-06	15-07-0294-28-A	07/07/15 14:55	Solid	ICP 7300	07/08/15	07/10/15 00:30	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		70.7		0.505	1.01				
SCH-16-12	15-07-0294-29-A	07/07/15 14:58	Solid	ICP 7300	07/08/15	07/10/15 00:30	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		48.0		0.485	0.971				
SCH-16-18	15-07-0294-30-A	07/07/15 15:03	Solid	ICP 7300	07/08/15	07/10/15 00:31	150708L02		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		
Lead		18.4		0.510	1.02				
SCH-11-01 (sieve)	15-07-0294-33-A	07/07/15 09:00	Solid	ICP 7300	07/08/15	07/10/15 00:32	150708L02		
	ed prior to preparation / a		ient instruc						
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

0.515

1.03

101

**Qualifiers** 



#### **Analytical Report**

Advanced GeoServices C	Corporation		Date Rec	eived:			07/07/15
1055 Andrew Drive, Suite	ve, Suite A Work Order:						15-07-0294
West Chester, PA 19380-	ester, PA 19380-4293 Preparation:						EPA 3050B
			Method:				EPA 6010B
	Units:						mg/kg
Project: Exide Vernon Off	site / 2013-3007-09					Pa	age 5 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-11-18 (sieve)	15-07-0294-34-A	07/07/15 09:12	Solid	ICP 7300	07/08/15	07/10/15 00:35	150708L02
Comment(s): - The sample	was sieved prior to preparation / a	analysis per cl	ient instruction	ons. See case na	rrative for spec	ific procedure.	
<u>Parameter</u>		Result	<u> </u>	<u>RL</u>	<u>DF</u>	<u>Qu</u>	<u>alifiers</u>
Lead		15.4	0.478		0.957		
SCH-13-01 (sieve)	15-07-0294-35-A	07/07/15 10:55	Solid	ICP 7300	07/08/15	07/10/15 00:35	150708L02
Comment(s): - The sample	was sieved prior to preparation / a	analysis per cl	ient instruction	ons. See case na	rrative for spec	ific procedure.	
<u>Parameter</u>		Result	<u>!</u>	<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		76.0	(	0.505	1.01		
SCH-14-01 (sieve)	15-07-0294-36-A	07/07/15 12:10	Solid	ICP 7300	07/08/15	07/10/15 00:36	150708L02
Comment(s): - The sample	was sieved prior to preparation / a	analysis per cl	ient instruction	ons. See case na	rrative for spec	ific procedure.	
<u>Parameter</u>		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		24.2	(	0.500	1.00		
SCH-15-01 (sieve)	15-07-0294-37-A	07/07/15 13:45	Solid	ICP 7300	07/08/15	07/10/15 00:37	150708L02
Comment(s): - The sample	was sieved prior to preparation / a	analysis per cl	ient instruction	ons. See case na	rrative for spec	ific procedure.	
<u>Parameter</u>		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		41.3	(	0.524	1.05		
SCH-16-01 (sieve)	15-07-0294-38-A	07/07/15 14:45	Solid	ICP 7300	07/08/15	07/10/15 00:37	150708L02
Comment(s): - The sample	was sieved prior to preparation / a	analysis per cl	ient instruction	ons. See case na	rrative for spec	ific procedure.	
<u>Parameter</u>		Result	1	<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		40.7	(	0.493	0.985		
Method Blank	097-01-002-21384	N/A	Solid	ICP 7300	07/08/15	07/09/15 23:22	150708L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Lead		ND	(	0.503	1.01		
Method Blank	097-01-002-21383	N/A	Solid	ICP 7300	07/08/15	07/09/15 22:01	150708L02

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<u>Parameter</u>

Lead

<u>RL</u>

0.498

<u>DF</u>

0.995

Result

ND

Qualifiers



<u>Parameter</u>

Lead

Project: Exide Vernon Offsite / 2013-3007-09

#### **Analytical Report**

Advanced GeoServices Corporation

Date Received:

07/07/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0294

West Chester, PA 19380-4293

Preparation:

Method:

EPA 3010A Total

Method:

EPA 6010B

Units:

mg/L

Page 1 of 1

<u>DF</u>

1.00

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-070615	15-07-0294-31-A	07/06/15 15:45	Aqueous	ICP 7300	07/08/15	07/10/15 23:39	150708LA7
<u>Parameter</u>		Result	RL		<u>DF</u>	Quali	fiers
Lead		ND	0.0	100	1.00		
EB-070715	15-07-0294-32-A	07/07/15 16:30	Aqueous	ICP 7300	07/08/15	07/10/15 23:42	150708LA7

<u>RL</u>

0.0100

Method Blank	097-01-003-15195	N/A	Aqueous	ICP 7300	07/08/15	07/09/15 12:41	150708LA7
Parameter		Result	RL		<u>DF</u>	Qu	alifiers
Lead		ND	0.01	100	1.00		

Result

ND





#### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

07/07/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0294

West Chester, PA 19380-4293

Preparation:

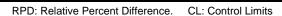
EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 1 of 3

Quality Control Sample ID	Туре		Matrix	Instr	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
SCH-11-01	Sample		Solid	ICP	7300	07/08/15	07/09/15	23:29	150708S01	
SCH-11-01	Matrix Spike		Solid	ICP	7300	07/08/15	07/09/15	23:25	150708S01	
SCH-11-01	Matrix Spike I	Duplicate	Solid	ICP	7300	07/08/15	07/09/15	23:27	150708S01	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	155.4	25.00	309.0	4X	197.4	4X	75-125	4X	0-20	Q





#### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

Work Order:

15-07-0294

West Chester, PA 19380-4293

Preparation:

Method:

Date Received:

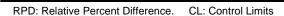
07/07/15

15-07-0294

EPA 3050B

Project: Exide Vernon Offsite / 2013-3007-09	Page 2 of 3
--	-------------

Quality Control Sample ID	Туре	Matrix	Instru	ıment	Date Prepared	Date Anal	lyzed	MS/MSD Bat	ch Number
SCH-15-01	Sample	Solid	ICP 7	7300	07/08/15	07/09/15	22:21	150708S02	
SCH-15-01	Matrix Spike	Solid	ICP 7300		07/08/15 07/09/15 22:		22:17	150708S02	
SCH-15-01	Matrix Spike Duplica	te Solid	ICP 7	7300	07/08/15	07/09/15	22:19	150708S02	
Parameter	Sample Spike Conc. Adde	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	43.11 25.00	66.72	94	72.91	119	75-125	9	0-20	





#### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

07/07/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0294

West Chester, PA 19380-4293

Preparation:

Method:

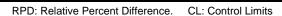
EPA 3010A Total

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 3 of 3

Quality Control Sample ID	Туре		Matrix	Ins	strument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
15-07-0357-1	Sample		Aqueous	Aqueous ICP 7300		07/08/15	07/10/15 14:31		150708SA7	
15-07-0357-1	Matrix Spike	Matrix Spike		Aqueous ICP 7300		07/08/15	15 07/09/15 12:50		150708SA7	
15-07-0357-1	Matrix Spike Duplicate		Aqueous ICP 7300		07/08/15	07/09/15	12:52	150708SA7		
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	ND	0.5000	0.6132	123	0.5993	120	84-120	2	0-7	3





#### **Quality Control - LCS**

Advanced GeoServices Corporation

Date Received:

07/07/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0294

West Chester, PA 19380-4293

Preparation:

EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09

Page 1 of 3

Quality Control Sample ID	Туре	Matrix	Instrument	Date Pr	epared Da	te Analyzed	LCS Batch	Number
097-01-002-21384	LCS	Solid	ICP 7300	07/08/1	5 07/	/09/15 23:24	150708L01	
<u>Parameter</u>		Spike Added	Conc. Recove	ered L	CS %Rec.	%Rec.	. <u>CL</u>	<u>Qualifiers</u>
Lead		25.00	26.14	1	05	80-120	)	



#### **Quality Control - LCS**

Advanced GeoServices Corporation

Date Received:

07/07/15

1055 Andrew Drive, Suite A

Work Order:

15-07-0294

West Chester, PA 19380-4293

Preparation:

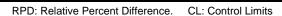
EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-21383	LCS	Solid	ICP 7300	07/08/15	07/09/15 22:03	150708L02
Parameter		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec	. CL Qualifiers
Lead		25.00	26.24	105	80-120	0





#### **Quality Control - LCS**

Advanced GeoServices Corporation 1055 Andrew Drive, Suite A West Chester, PA 19380-4293 Date Received: Work Order: Preparation: Method:

15-07-0294 EPA 3010A Total EPA 6010B

07/07/15

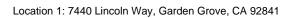
Project: Exide Vernon Offsite / 2013-3007-09

Quality Control Sample ID	Type	Matrix	Instrument [	Date Prepared	Date Analyzed	LCS Batch Number
097-01-003-15195	LCS	Aqueous	ICP 7300 0	07/08/15	07/09/15 12:44	150708LA7
<u>Parameter</u>		Spike Added	Conc. Recovered	ed LCS %Re	ec. %Rec.	. CL Qualifiers
Lead		0.5000	0.5527	111	80-120	)



#### **Sample Analysis Summary Report**

Work Order: 15-07-0294				Page 1 of 1
Method	<b>Extraction</b>	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3010A Total	771	ICP 7300	1
EPA 6010B	EPA 3050B	771	ICP 7300	1





#### **Glossary of Terms and Qualifiers**

Work Order: 15-07-0294 Page 1 of 1

Qualifiers	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
В	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike

- concentration by a factor of four or greater.

  SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- X % Recovery and/or RPD out-of-range.
- Z Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Date/Time:

Received By:

Relinquished By:

1007

ADVANCED GEOSERVICES CORP.

CHAIN OF CUSTODY

Project # 2013-3007-09

Lab Name/Location: Calscience, Garden Grove, CA

Project Name: Exide Vernon Offsite AGC Contact: Adam Doubleday

1055 Andrew Dr. Suite A West Chester, PA 19380 tel 610.840.9100

15-07-0294

Deliverables (circle one) Results only (Results/QC summary) CLP-Like Shipment Tracking # courier pick-up Shipment # 30% p I

CLP-Like	
ults/QC summary	
Results only Result	A NY A I AZOTO
(circle one)	s
Deliverables	(
24-Hour	
72-Hour 2	
around Time (circle one) Standard 5-Day	
Turn	,

					TJ.W	Ž	>																	
	REMARKS	23			9 !	Refused - 4 point Sampa	±~					<i>∞</i>					36					US:31 51		
sə.	Preservativ																					Sloge/t		
ANALYSIS	SEIAE #00	×				×					***	×		*			×			,		Date/Time: 7/	Date/Time:	
ers	# of Contain									_											_ 	10		
-	Field Filtere	У																			<u> </u>			
	xiriteM	S									- CONTRACTOR OF THE PERSON	-						_		****	Ş	٠		
	Sample Tyl (O 10 O)	7				_															$\Lambda$	4	7	
	Time	906	903	906	dod	2/6	1020	5201	1030	1035	01:01	5501	. 0011	501	0111	اااک	0121	H101	8121	2221	9221		-	>.
	Date	7-7-15		^							/										<u> </u>	Received Bv:	Received Bv:	
	Sample ID	SCH-11-01	SCH-11-03	SCH-11-06	SCH-11-12	SCH-11-18	10-21-HJS	SCH -17 -03	30-21-HJS	21-21-H7S	81-21-H2S	SCH-13-0)	sc#~13~03	SCH-13-06	(	SCH -13-18	10-11-175	20-H-H7S		21-11-12	81-h1-H2S	Relinquished By: Muly Hosel	Relinguished By:	
γly	Lab Use On	,	0	4	7	1,	Q	1	Ò	6	2		12	13	141	(5)	3	17	8	60	20		-	

Preservative: 1-ice, 2- H<sub>2</sub>SO<sub>4</sub>, 3-HCl, 4-HNO<sub>3</sub>, 5-NaOH, 6-ZnOAC Remarks: EZ - Exclusion Zone Sample Matrix: SW - Surface Water, GW - Groundwater, Sed - Sediment, S - Soil, Sld - Sludge, A - Air PA1325 AGC-Exide\_VernonN007\_Offsite Soil SamplingtP

Return to Contents

Date/Time: 7/7/2015

Received By:

Received By: Received By:

Relinquished By:

Relinquished By Relinquished By:

Date/Time:\_ Date/Time:

# ADVANCED GEOSERVICES CORP. CHAIN OF CUSTODY

Project # 2013-3007-09

Shipment #

Standard 5-Day 72-Hour 24-Hour

Lab Name/Location: Calscience, Garden Grove, CA

Turnaround Time (circle one)

Project Name: Exide Vernon Offsite AGC Contact: Adam Doubleday

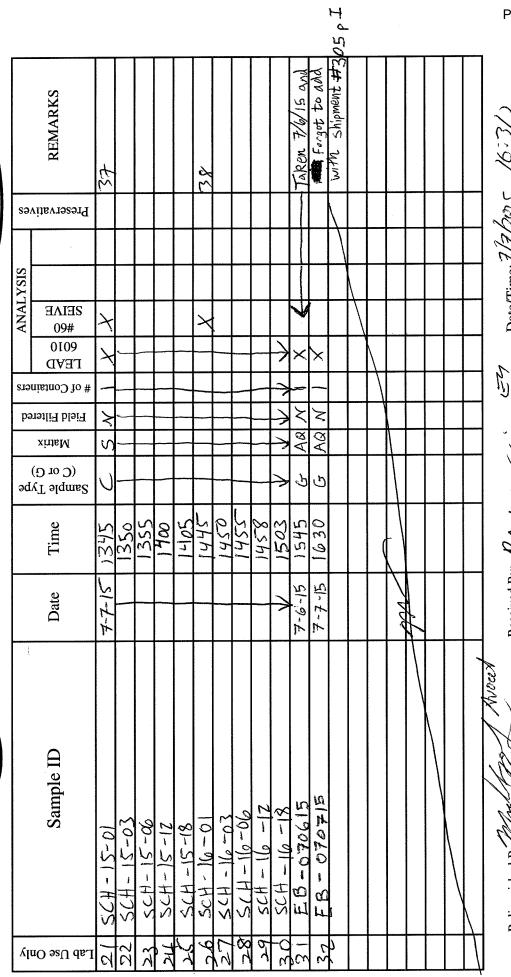
1055 Andrew Dr. Suite A West Chester, PA 19380

tel 610.840.9100

Deliverables (circle one) Results only (Results/QC summary) CLP-Like Shipment Tracking # courier pick-up



20F2



Preservative: 1-ice, 2- H<sub>2</sub>SO<sub>4</sub>, 3-HCl, 4-HNO<sub>3</sub>, 5-NaOH, 6-ZnOAC Remarks: EZ - Exclusion Zone Sample Matrix: SW - Surface Water, GW - Groundwater, Sed - Sediment, S - Soil, Sld - Sludge, A - Air Pr1325 AGC-Exide\_VernonN007\_Offsite Soil Sampling P

Return to Contents

Calscience

WORK ORDER NUMBER: 15-07- 094

#### SAMPLE RECEIPT CHECKLIST

COOLER \_/\_ OF \_/\_

CLIENT: Exide			DA	ATE: 07	1 07	/ 2015
TEMPERATURE: (Criteria: 0.0°C − 6.0°C, n Thermometer ID: SC5 (CF:-0.2°C); Tempera  □ Sample(s) outside temperature criteria □ Sample(s) outside temperature criteria	ture (w/o CF): // - (PM/APM contacted	<b>7</b> °C (w/ CF): <b>/</b> by:)		⊒ Blank ↓	ZSamp	ole
☐ Sample(s) received at ambient temperature  Ambient Temperature: ☐ Air ☐ Filter			. capg	Checke	ed by: _	836
CUSTODY SEAL:						A.
	esent but Not Intact esent but Not Intact	Not Present Not Present	□ N/A		ed by: _ ed by: _	1 -0
SAMPLE CONDITION:				Yes	No	N/A
Chain-of-Custody (COC) document(s) receive	ed with samples					
COC document(s) received complete				🔎		
☐ Sampling date ☐ Sampling time ☐ N						
☐ No analysis requested ☐ Not relinqui	•					
Sampler's name indicated on COC						
Sample container label(s) consistent with CC						
Sample container(s) intact and in good cond	ition					, 📙
Proper containers for analyses requested .				Æ		
Sufficient volume/mass for analyses request						
Samples received within holding time				ممر		
Aqueous samples for certain analyses re-		-				
□ pH □ Residual Chlorine □ Dissolve						
Proper preservation chemical(s) noted on Co					Ц	L
Unpreserved aqueous sample(s) received						
☐ Volatile Organics ☐ Total Metals ☐				П		
Container(s) for certain analysis free of head	*			📖	Ц	تصلب
☐ Volatile Organics ☐ Dissolved Gases☐ Carbon Dioxide (SM 4500) ☐ Ferrous						
Tedlar™ bag(s) free of condensation	•			П		
						, <del></del>
CONTAINER TYPE:			k Lot Numi			)
Aqueous:         □ VOA         □ VOAh         □ VOAna₂         □           □ 125PBznna         □ 250AGB         □ 250CGB         □ 250CGB </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
☐ 500PB ☐ 1AGB ☐ 1AGBna₂ ☐ 1AGBs	*					
Solid: □ 4ozCGJ □ 8ozCGJ □ 16ozCGJ		FnCores®( ) [	TerraCores	® ( )		2
Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube	PUF I	Other Matrix (	)·	· \/ .	<i></i>	
Container: A = Amber, B = Bottle, C = Clear, E =						
Preservative: <b>b</b> = buffered, <b>f</b> = filtered, <b>h</b> = HCl, <b>n</b>	L= HNO₃ na = NaOH r	122 = Na2S2O2. n = H2P	O <sub>4</sub> . Labe	led/Check	ed bv:	603

 $\mathbf{s} = H_2SO_4$ ,  $\mathbf{u} = \text{ultra-pure}$ ,  $\mathbf{znna} = \text{Zn}(CH_3CO_2)_2 + \text{NaOH}$ 

Reviewed by: 236

#### **ATTACHMENT 2**

DTSC Review of July 2015 Soil Sampling Field Activities Report Los Angeles Unified School District Schools

July 31, 2015





Matthew Rodriquez
Secretary for
Environmental Protection

### Department of Toxic Substances Control



Barbara A. Lee, Director 8800 Cal Center Drive Sacramento, California 95826-3200

July 31, 2015

Mr. Fredrick Ganster Exide Technologies 3000 Montrose Avenue Reading, Pennsylvania 19605

DTSC REVIEW OF REVISED JULY 2015 SOIL SAMPLING FIELD ACTIVITIES REPORT, LOS ANGELES UNIFIED SCHOOL DISTRICT SCHOOLS, EXIDE TECHNOLOGIES, VERNON, CA (CORRECTIVE ACTION CONSENT ORDER, DOCKET NUMBER P3-01 /02-010)

Dear Mr. Ganster:

The Department of Toxic Substances Control (DTSC) has reviewed the report titled "July 2015 Soil Sampling Field Activities Report, Los Angeles Unified School District Schools" (Report), which was prepared by Avocet Environmental Inc. (Avocet) for Advanced GeoServices Inc. (AGC), a consultant for Exide Technologies, Inc. (Exide). The Report is dated July 30, 2015 and was received by DTSC via email on July 31, 2015. The Report includes a cover letter prepared by AGC, also dated July 31, 2015, and addressed to Mr. Pat Shanen of the Los Angeles County Unified School District (LAUSD). The Report documents the sampling protocol and the results of laboratory analysis of soil samples collected from 11 LAUSD schools on July 6 and 7, 2015. DTSC staff was present during the stated July 6 and July 7, 2015 sampling work, and based on our review of the Report we have concluded that the sampling protocol as stated in the Report is accurate.

The results of laboratory analysis are provided in table format, attached to the AGC cover letter. DTSC cannot validate the tabulated information in the AGC cover letter since the actual laboratory data was not provided in the Report. Exide must provide DTSC with validated laboratory reports that verify the tabulated soil concentrations submitted without delay.

Notwithstanding the above, DTSC has reviewed the information provided in AGC's cover letter and has concluded that additional analysis for lead in soils is necessary to gain a better understanding for lead concentrations exceeding 80 parts-per-million for the composite samples. Based on the tables this additional analysis would include the samples from: SCH-07 (0-1", 1-3", and 3-6"); SCH-09 (3-6"); SCH-11 (0-1" and 1-3"); and SCH-13 (0-1"). The additional laboratory analysis should be performed on an expedited basis.

Mr. Frederick Ganster July 31, 2015 Page 2

Should you have any questions regarding this letter, please contact me at 916-255-3630 or <a href="Peter.Ruttan@dtsc.ca.gov">Peter.Ruttan@dtsc.ca.gov</a>.

Sincerely,

Peter Ruttan
Project Manager
Office of Permitting

cc: (via e-mail)

Mr. Chuck Giesige, Exide

Mr. Tom Strang, Exide

Mr. John Hogarth, Exide

Ms. Christine Graessle, Exide

Mr. Paul Stratman, AGC

Ms. Barbara Forslund, AGC

Mr. Pat Shanen, LAUSD

Mr. Keith Kihara, DTSC

Mr. Rizgar Ghazi, DTSC

Ms. Suhasini Patel, DTSC

Mr. Richard Sherwood, DTSC

Mr. Todd Wallbom, DTSC

Ms. Dina Kourda

Ms. Yolanda Garza

#### **ATTACHMENT 3**

**Select Discrete Sample Results** 

**Received August 2015** 

Sample Location(s): <u>SCH-07 (composite)</u>

Sample Date: 7/6/2015

Sample Depth	SCH-07
0-1"	81.7
1-3"	87.3
3-6"	81.5
6-12"	66.4
12-18"	17.1

Samples are composites
All lead results reported in mg/kg

Sample Location: SCH-07 (discrete)

Sample Date: 7/6/2015

Sample Depth	1D	2D	3D	4D	5D
0-1"	35.7	213	170	70.3	66.4
1-3"	65.7	219	158	65.2	58.7
3-6"	78.9	217	171	68.7	23.4
6-12"	NA	NA	NA	NA	NA
12-18"	NA	NA	NA	NA	NA

All lead results reported in mg/kg



Sample Location(s): SCH-09 (composite)

Sample Date: 7/6/2015

Sample Depth	SCH-09
0-1"	68.6
1-3"	70.1
3-6"	112
6-12"	52.6
12-18"	29.9

Samples are composites
All lead results reported in mg/kg

Sample Location: SCH-09 (discrete)

Sample Date: 7/6/2015

Sample Depth	1D	2D	3D	4D	5D
0-1"	NA	NA	NA	NA	NA
1-3"	NA	NA	NA	NA	NA
3-6"	105	19.5	139	163	17.5
6-12"	NA	NA	NA	NA	NA
12-18"	NA	NA	NA	NA	NA

All lead results reported in mg/kg



Sample Location(s): SCH-11 (composite)

Sample Date: 7/7/2015

Sample Depth	SCH-11
0-1"	155
1-3"	207
3-6"	44.6
6-12"	43.6
12-18"	15.6

Samples are composites

All lead results reported in mg/kg

Sample Location: SCH-11 (discrete)

Sample Date: 7/7/2015

Sample Depth	1D	2D	3D	4D	5D
0-1"	481	688	80.8	31.9	29.4
1-3"	220	450	85.2	28.8	29.2
3-6"	NA	NA	NA	NA	NA
6-12"	NA	NA	NA	NA	NA
12-18"	NA	NA	NA	NA	NA

All lead results reported in mg/kg



Sample Location(s): SCH-13 (composite)

Sample Date: 7/7/2015

Sample Depth	SCH-13
0-1"	88.1
1-3"	74.8
3-6"	70.4
6-12"	45.3
12-18"	22.1

Samples are composites
All lead results reported in mg/kg

Sample Location: SCH-13 (discrete)

Sample Date: 7/7/2015

Sample Depth	1D	2D	3D	4D	5D
0-1"	183	144	25.8	29.8	37.9
1-3"	NA	NA	NA	NA	NA
3-6"	NA	NA	NA	NA	NA
6-12"	NA	NA	NA	NA	NA
12-18"	NA	NA	NA	NA	NA

All lead results reported in mg/kg



#### DATA VALIDATION SUMMARY Level I

Site Name: Project Number: Sampling Date(s):	Exide Vernon 2013-3007 7/6 - 7/7/15				aboratory: ase/Order/SDG #	Calscience 15-08-0208
Compound List:	Lead					
Method:	6010					
The following table ind	icates the data validation	n criteria (	examin	ed, any pro	oblems identified	, and the QA action applied.
Data Validation Criteria	ı:	Accept	FYI	Qualify	Comments	
Holding Times Blank Analysis Field Duplicate Analysis Surrogate Recoveries Matrix Spike Analysis ( Laboratory Control San Laboratory Duplicate A Overall Assessment of I Other: General Comments:	MS/MSD)  uple Analysis (LCS)  nalysis	X X X	X		NA NA Sample conc >4 NA	X spike conc
Accept - No qualification FYI - For your informat Qualify - Qualify as rejo	tion only, no qualification		nry.			

QA Scientist 8/10/2015

F:\Projects\2013\2013\2013\3007 - Exide Vermon Interim Status (Post BR)\Lab Data\Data\Data Validation Reports\Residential Soils\_2014-2015\SDGs\15-08-0208\15-08-0208\Level I

NR - Not Reviewed NA - Not Applicable



Advanced GeoServices Corporatio	n		Date Re	ceived:			08/04/15
1055 Andrew Drive, Suite A		,	Work Or	rder:			15-08-0208
West Chester, PA 19380-4293			Preparat	tion:			EPA 3050B
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 2013	3-3007-09					Pa	ge 1 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-07-1D-01	15-08-0208-1-A	07/06/15 09:15	Solid	ICP 8300	08/04/15	08/05/15 12:27	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		35.7		0.495	0.990		
SCH-07-1D-03	15-08-0208-2-A	07/06/15 09:16	Solid	ICP 8300	08/04/15	08/05/15 12:28	150804L07
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Lead		65.7		0.488	0.976		
SCH-07-1D-06	15-08-0208-3-A	07/06/15 09:17	Solid	ICP 8300	08/04/15	08/05/15 12:31	150804L07
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Lead		78.9		0.518	1.04		
SCH-07-2D-01	15-08-0208-4-A	07/06/15 09:20	Solid	ICP 8300	08/04/15	08/05/15 12:31	150804L07
SCH-07-2D-01 Parameter	15-08-0208-4-A		Solid	ICP 8300	08/04/15 <u>DF</u>	12:31	150804L07
	15-08-0208-4-A	09:20	Solid			12:31	
<u>Parameter</u>	15-08-0208-4-A 15-08-0208-5-A	09:20 Result	Solid Solid	RL	<u>DF</u>	12:31	
Parameter Lead		09:20  Result 213  07/06/15		<u>RL</u> 0.503	<u>DF</u> 1.01	08/05/15 12:32	alifiers
Parameter Lead SCH-07-2D-03		09:20  Result 213  07/06/15 09:21		RL 0.503	DF 1.01 08/04/15	08/05/15 12:32	150804L07
Parameter Lead  SCH-07-2D-03  Parameter		09:20  Result 213  07/06/15 09:21  Result		RL 0.503 ICP 8300	DF 1.01 08/04/15	08/05/15 12:32	150804L07
Parameter Lead  SCH-07-2D-03  Parameter Lead	15-08-0208-5-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15	Solid	RL 0.503 ICP 8300 RL 0.515	DF 1.01 08/04/15 DF 1.03	08/05/15 12:32 Qua 08/05/15 12:33	alifiers  150804L07  alifiers
Parameter Lead  SCH-07-2D-03  Parameter Lead  SCH-07-2D-06	15-08-0208-5-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15 09:22	Solid	RL 0.503 ICP 8300 RL 0.515	DF 1.01 08/04/15 DF 1.03	08/05/15 12:32 Qua 08/05/15 12:33	150804L07 alifiers 150804L07
Parameter Lead  SCH-07-2D-03  Parameter Lead  SCH-07-2D-06  Parameter	15-08-0208-5-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15 09:22  Result	Solid	RL 0.503 ICP 8300 RL 0.515 ICP 8300	DF 1.01 08/04/15 DF 1.03 08/04/15	08/05/15 12:32 Qua 08/05/15 12:33	150804L07 alifiers 150804L07
Parameter Lead  SCH-07-2D-03  Parameter Lead  SCH-07-2D-06  Parameter Lead	15-08-0208-5-A 15-08-0208-6-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15 09:22  Result 217  07/06/15	Solid	RL 0.503 ICP 8300 RL 0.515 ICP 8300 RL 0.508	DF 1.01 08/04/15 DF 1.03 08/04/15 DF 1.02	08/05/15 12:32 Qua 08/05/15 12:33 Qua 08/05/15 12:34	150804L07  150804L07  150804L07
Parameter Lead  SCH-07-2D-03  Parameter Lead  SCH-07-2D-06  Parameter Lead  SCH-07-3D-01	15-08-0208-5-A 15-08-0208-6-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15 09:22  Result 217  07/06/15 09:25	Solid	RL 0.503 ICP 8300 RL 0.515 ICP 8300 RL 0.508	DF 1.01 08/04/15 DF 1.03 08/04/15 DF 1.02	08/05/15 12:32 Qua 08/05/15 12:33 Qua 08/05/15 12:34	150804L07 alifiers 150804L07 alifiers 150804L07
Parameter Lead  SCH-07-2D-03  Parameter Lead  SCH-07-2D-06  Parameter Lead  SCH-07-3D-01  Parameter	15-08-0208-5-A 15-08-0208-6-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15 09:22  Result 217  07/06/15 09:25  Result	Solid	RL 0.503 ICP 8300 RL 0.515 ICP 8300 RL 0.508	DF 1.01 08/04/15 DF 1.03 08/04/15 DF 1.02 08/04/15	08/05/15 12:32 Qua 08/05/15 12:33 Qua 08/05/15 12:34	150804L07 alifiers 150804L07 alifiers 150804L07
Parameter Lead  SCH-07-2D-03  Parameter Lead  SCH-07-2D-06  Parameter Lead  SCH-07-3D-01  Parameter Lead	15-08-0208-5-A 15-08-0208-6-A 15-08-0208-7-A	09:20  Result 213  07/06/15 09:21  Result 219  07/06/15 09:22  Result 217  07/06/15 09:25  Result 170  07/06/15	Solid Solid	RL 0.503 ICP 8300 RL 0.515 ICP 8300 RL 0.508 ICP 8300	DF 1.01 08/04/15 DF 1.03 08/04/15 DF 1.02 08/04/15 DF 0.985	08/05/15 12:32  08/05/15 12:33  Qua  08/05/15 12:34  Qua  08/05/15 12:35	150804L07 alifiers  150804L07 alifiers





Advanced GeoServices Corporatio	n		Date Re	ceived:			08/04/15
1055 Andrew Drive, Suite A			Work O	15-08-0208			
West Chester, PA 19380-4293			Prepara		EPA 3050B		
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 201	3-3007-09					Pa	ge 2 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-07-3D-06	15-08-0208-9-A	07/06/15 09:27	Solid	ICP 8300	08/04/15	08/05/15 12:36	150804L07
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Lead		171		0.483	0.966		
SCH-07-4D-01	15-08-0208-10-A	07/06/15 09:30	Solid	ICP 8300	08/04/15	08/05/15 12:37	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		70.3		0.495	0.990		
SCH-07-4D-03	15-08-0208-11-A	07/06/15 09:31	Solid	ICP 8300	08/04/15	08/05/15 12:37	150804L07
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		65.2		0.513	1.03		
SCH-07-4D-06	15-08-0208-12-A	07/06/15 09:32	Solid	ICP 8300	08/04/15	08/05/15 12:38	150804L07
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
Lead		68.7		0.498	0.995		
SCH-07-5D-01	15-08-0208-13-A	07/06/15	Solid	ICP 8300	08/04/15	08/05/15	150804L07
		09:35				12:41	100004207
<u>Parameter</u>		09:35 Result		<u>RL</u>	<u>DF</u>	12:41	alifiers
Parameter Lead				<u>RL</u> 0.483	<u>DF</u> 0.966	12:41	
	15-08-0208-14-A	Result	Solid			12:41	
Lead	15-08-0208-14-A	Result 66.4 07/06/15	Solid	0.483	0.966	08/05/15 12:42	alifiers
Lead SCH-07-5D-03	15-08-0208-14-A	Result 66.4 07/06/15 09:36	Solid	0.483 ICP 8300	0.966 <b>08/04/15</b>	08/05/15 12:42	150804L07
SCH-07-5D-03 Parameter	15-08-0208-14-A 15-08-0208-15-A	Result 66.4 07/06/15 09:36 Result	Solid	0.483  ICP 8300  RL	0.966 <b>08/04/15</b> <u>DF</u>	08/05/15 12:42	150804L07
SCH-07-5D-03  Parameter Lead		Result 66.4  07/06/15 09:36  Result 58.7  07/06/15 09:37  Result		0.483  ICP 8300  RL 0.508  ICP 8300  RL	0.966  08/04/15  DF  1.02	08/05/15 12:42 Qua 08/05/15 12:43	150804L07
Lead  SCH-07-5D-03  Parameter Lead  SCH-07-5D-06		Result 66.4  07/06/15 09:36  Result 58.7  07/06/15 09:37		0.483  ICP 8300  RL 0.508  ICP 8300	0.966  08/04/15  DF 1.02  08/04/15	08/05/15 12:42 Qua 08/05/15 12:43	150804L07 alifiers 150804L07
Lead  SCH-07-5D-03  Parameter Lead  SCH-07-5D-06  Parameter		Result 66.4  07/06/15 09:36  Result 58.7  07/06/15 09:37  Result		0.483  ICP 8300  RL 0.508  ICP 8300  RL	0.966  08/04/15  DF 1.02  08/04/15  DE	08/05/15 12:42 Qua 08/05/15 12:43	150804L07 alifiers 150804L07
SCH-07-5D-03  Parameter Lead  SCH-07-5D-06  Parameter Lead	15-08-0208-15-A	Result 66.4  07/06/15 09:36  Result 58.7  07/06/15 09:37  Result 23.4	Solid	0.483  ICP 8300  RL  0.508  ICP 8300  RL  0.518	0.966  08/04/15  DF 1.02  08/04/15  DF 1.04	08/05/15 12:42 Qua 08/05/15 12:43 Qua 08/05/15 12:44	150804L07  lifiers  150804L07  alifiers





Advanced GeoServices Corporation	า	Date Received:				08/04/15	
1055 Andrew Drive, Suite A			Work O	rder:	15-08-0208		
West Chester, PA 19380-4293			Prepara	tion:	EPA 3050B		
			Method:	:			EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 2013	3-3007-09					Pa	ge 3 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-09-2D-06	15-08-0208-17-A	07/06/15 12:32	Solid	ICP 8300	08/04/15	08/05/15 12:45	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		19.5		0.483	0.966		
SCH-09-3D-06	15-08-0208-18-A	07/06/15 12:38	Solid	ICP 8300	08/04/15	08/05/15 12:46	150804L07
Parameter		Result		<u>RL</u>	DF	Qua	alifiers
Lead		139		0.510	1.02		
SCH-09-4D-06	15-08-0208-19-A	07/06/15 12:42	Solid	ICP 8300	08/04/15	08/05/15 12:46	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		163		0.495	0.990		
SCH-09-5D-06	15-08-0208-20-A	07/06/15 12:47	Solid	ICP 8300	08/04/15	08/05/15 12:47	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		17.5		0.490	0.980		
SCH-11-1D-01	15-08-0208-21-A	07/07/15 08:20	Solid	ICP 8300	08/04/15	08/05/15 12:48	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		481		0.495	0.990		
SCH-11-1D-03	15-08-0208-22-A	07/07/15 08:21	Solid	ICP 8300	08/04/15	08/05/15 12:49	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		220		0.505	1.01		
SCH-11-2D-01	15-08-0208-23-A	07/07/15 08:25	Solid	ICP 8300	08/04/15	08/05/15 12:52	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		688		0.481	0.962		
SCH-11-2D-03	15-08-0208-24-A	07/07/15 08:26	Solid	ICP 8300	08/04/15	08/05/15 12:53	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		450		0.513	1.03		





Advanced GeoServices Corporation	1		Date Received: 08/0					
1055 Andrew Drive, Suite A			Work O		15-08-0208			
West Chester, PA 19380-4293			Prepara	tion:			EPA 3050B	
·			Method:				EPA 6010B	
			Units:				mg/kg	
Project: Exide Vernon Offsite / 2013	3-3007-09					Pa	ge 4 of 5	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
SCH-11-3D-01	15-08-0208-25-A	07/07/15 08:30	Solid	ICP 8300	08/04/15	08/05/15 12:53	150804L08	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
Lead		80.8		0.513	1.03			
SCH-11-3D-03	15-08-0208-26-A	07/07/15 08:31	Solid	ICP 8300	08/04/15	08/05/15 12:54	150804L08	
Parameter		Result		<u>RL</u>	DF	Qua	<u>llifiers</u>	
Lead		85.2		0.508	1.02			
SCH-11-4D-01	15-08-0208-27-A	07/07/15 08:35	Solid	ICP 8300	08/04/15	08/05/15 12:55	150804L08	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	lifiers	
Lead		31.9		0.476	0.952			
SCH-11-4D-03	15-08-0208-28-A	07/07/15 08:36	Solid	ICP 8300	08/04/15	08/05/15 12:56	150804L08	
Parameter		Result		<u>RL</u>	DF	Qua	<u>llifiers</u>	
Lead		28.8		0.510	1.02			
SCH-11-5D-01	15-08-0208-29-A	07/07/15 08:40	Solid	ICP 8300	08/04/15	08/05/15 12:57	150804L08	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
Lead		29.4		0.510	1.02			
SCH-11-5D-03	15-08-0208-30-A	07/07/15 08:41	Solid	ICP 8300	08/04/15	08/05/15 12:58	150804L08	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
Lead		29.2		0.498	0.995			
SCH-13-1D-01	15-08-0208-31-A	07/07/15 10:25	Solid	ICP 8300	08/04/15	08/05/15 12:58	150804L08	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
Lead		183		0.490	0.980			
SCH-13-2D-01	15-08-0208-32-A	07/07/15 10:30	Solid	ICP 8300	08/04/15	08/05/15 12:59	150804L08	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
Lead		144		0.510	1.02			





Lead

#### **Analytical Report**

Advanced GeoServices Corporation Date Received: 08/04/15 Work Order: 15-08-0208 1055 Andrew Drive, Suite A West Chester, PA 19380-4293 Preparation: **EPA 3050B** Method: **EPA 6010B** Units: mg/kg Project: Exide Vernon Offsite / 2013-3007-09 Page 5 of 5 Lab Sample Number Date/Time Date Prepared Client Sample Number Date/Time QC Batch ID Matrix Instrument Collected Analyzed 08/05/15 13:02 15-08-0208-33-A 07/07/15 10:35 SCH-13-3D-01 **ICP 8300** 150804L08 Solid 08/04/15 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers 0.485 Lead 25.8 0.971 08/05/15 13:03 SCH-13-4D-01 15-08-0208-34-A 07/07/15 **ICP 8300** 08/04/15 150804L08 Solid <u>RL</u> <u>DF</u> Qualifiers **Parameter** Result Lead 29.8 0.515 1.03 07/07/15 10:45 08/05/15 13:04 SCH-13-5D-01 15-08-0208-35-A Solid **ICP 8300** 08/04/15 150804L08 <u>DF</u> RLQualifiers <u>Parameter</u> Result

Method Blank	097-01-002-21548	N/A	Solid	ICP 8300	08/04/15	08/05/15 12:19	150804L07
Parameter		<u>Result</u>	RL		<u>DF</u>	Quali	<u>fiers</u>
Lead		ND	0.5	600	1.00		

37.9

0.518

1.04

Method Blank	097-01-002-21549 N/A	Solid ICP	8300 08/04/15	08/05/15 150804L08 12:20
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Lead	ND	0.500	1.00	





#### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation Date Received: 08/04/15 1055 Andrew Drive, Suite A Work Order: 15-08-0208 **EPA 3050B** West Chester, PA 19380-4293 Preparation: Method: EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 2 of 2

Quality Control Sample ID	Туре	Matrix	Instrumer	nt Date Prepared	Date Analyzed	MS/MSD Bato	ch Number
SCH-11-1D-01	Sample	Solid	ICP 8300	08/04/15	08/05/15 12:48	150804S08	
SCH-11-1D-01	Matrix Spike	Solid	ICP 8300	08/04/15	08/05/15 12:25	150804S08	
SCH-11-1D-01	Matrix Spike Duplicate	Solid	ICP 8300	08/04/15	08/05/15 12:26	150804S08	
Parameter	Sample Spike Conc. Added	MS Conc.	<u>MS</u> <u>MS</u> <u>%Rec.</u> <u>Co</u>	SD MSD inc. %Rec.	%Rec. CL RPD	RPD CL	Qualifiers
Lead	481.2 25.00	413.8	4X 29	5.5 (4X)	75-125 4X	0-20	Q









# **Calscience**



# WORK ORDER NUMBER: 15-08-0208

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

**Client:** Advanced GeoServices Corporation

Client Project Name: Exide Vernon Offsite / 2013-3007-09

**Attention:** Adam Doubleday

1055 Andrew Drive, Suite A West Chester, PA 19380-4293

amande Porter

Approved for release on 08/05/2015 by: Amanda Porter

**Project Manager** 



Email your PM >

ResultLink >

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



# **Contents**

Client Project Name:	Exide Vernon Offsite / 2013-3007-09

Work Order Number: 15-08-0208

WOIK OIG	er Number. 13-00-0200	
1	Work Order Narrative	3
2	Client Sample Data	4 4
3	Quality Control Sample Data	9 9 11
4	Sample Analysis Summary	13
5	Glossary of Terms and Qualifiers	14
6	Chain-of-Custody/Sample Receipt Form	15



#### **Work Order Narrative**

Work Order: 15-08-0208 Page 1 of 1

#### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 08/04/15. They were assigned to Work Order 15-08-0208.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

#### **Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

#### **Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

#### **Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

#### **Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



Advanced GeoServices Corporation	on		Date Re	08/04/15			
1055 Andrew Drive, Suite A			Work O	15-08-0208			
West Chester, PA 19380-4293			Prepara	tion:			EPA 3050B
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 20	13-3007-09					Pa	age 1 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-07-1D-01	15-08-0208-1-A	07/06/15 09:15	Solid	ICP 8300	08/04/15	08/05/15 12:27	150804L07
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Lead		35.7		0.495	0.990		
SCH-07-1D-03	15-08-0208-2-A	07/06/15 09:16	Solid	ICP 8300	08/04/15	08/05/15 12:28	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		65.7		0.488	0.976		
SCH-07-1D-06	15-08-0208-3-A	07/06/15 09:17	Solid	ICP 8300	08/04/15	08/05/15 12:31	150804L07
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Lead		78.9		0.518	1.04		
SCH-07-2D-01	15-08-0208-4-A	07/06/15 09:20	Solid	ICP 8300	08/04/15	08/05/15 12:31	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		213		0.503	1.01		
SCH-07-2D-03	15-08-0208-5-A	07/06/15 09:21	Solid	ICP 8300	08/04/15	08/05/15 12:32	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		219		0.515	1.03		
SCH-07-2D-06	15-08-0208-6-A	07/06/15 09:22	Solid	ICP 8300	08/04/15	08/05/15 12:33	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		217		0.508	1.02		
SCH-07-3D-01	15-08-0208-7-A	07/06/15 09:25	Solid	ICP 8300	08/04/15	08/05/15 12:34	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		170		0.493	0.985		
SCH-07-3D-03	15-08-0208-8-A	07/06/15 09:26	Solid	ICP 8300	08/04/15	08/05/15 12:35	150804L07
Parameter		Result		<u>RL</u>	DF	Qua	alifiers
Lead		158		0.495	0.990		



Advanced GeoServices Corporation	n		Date Re	ceived:			08/04/15
1055 Andrew Drive, Suite A			Work O	rder:	15-08-0208		
West Chester, PA 19380-4293			Prepara		EPA 3050B		
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 201	3-3007-09					Pa	age 2 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-07-3D-06	15-08-0208-9-A	07/06/15 09:27	Solid	ICP 8300	08/04/15	08/05/15 12:36	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		171		0.483	0.966		
SCH-07-4D-01	15-08-0208-10-A	07/06/15 09:30	Solid	ICP 8300	08/04/15	08/05/15 12:37	150804L07
Parameter		Result		<u>RL</u>	DF	Qua	alifiers
Lead		70.3		0.495	0.990		
SCH-07-4D-03	15-08-0208-11-A	07/06/15 09:31	Solid	ICP 8300	08/04/15	08/05/15 12:37	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		65.2		0.513	1.03		
SCH-07-4D-06	15-08-0208-12-A	07/06/15 09:32	Solid	ICP 8300	08/04/15	08/05/15 12:38	150804L07
<u>Parameter</u>		Result		RL	DF	Qua	<u>alifiers</u>
Lead		68.7		0.498	0.995		
SCH-07-5D-01	15-08-0208-13-A	07/06/15 09:35	Solid	ICP 8300	08/04/15	08/05/15 12:41	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		66.4		0.483	0.966		
SCH-07-5D-03	15-08-0208-14-A	07/06/15 09:36	Solid	ICP 8300	08/04/15	08/05/15 12:42	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		58.7		0.508	1.02		
SCH-07-5D-06	15-08-0208-15-A	07/06/15 09:37	Solid	ICP 8300	08/04/15	08/05/15 12:43	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		23.4		0.518	1.04		
SCH-09-1D-06	15-08-0208-16-A	07/06/15 12:27	Solid	ICP 8300	08/04/15	08/05/15 12:44	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		105		0.503	1.01		



Advanced GeoServices Corporation	on		Date Re	ceived:			08/04/15
1055 Andrew Drive, Suite A			Work O	rder:	15-08-0208		
West Chester, PA 19380-4293			Prepara		EPA 3050B		
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 201	13-3007-09					Pa	age 3 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-09-2D-06	15-08-0208-17-A	07/06/15 12:32	Solid	ICP 8300	08/04/15	08/05/15 12:45	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		19.5		0.483	0.966		
SCH-09-3D-06	15-08-0208-18-A	07/06/15 12:38	Solid	ICP 8300	08/04/15	08/05/15 12:46	150804L07
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Lead		139		0.510	1.02		
SCH-09-4D-06	15-08-0208-19-A	07/06/15 12:42	Solid	ICP 8300	08/04/15	08/05/15 12:46	150804L07
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		163		0.495	0.990		
SCH-09-5D-06	15-08-0208-20-A	07/06/15 12:47	Solid	ICP 8300	08/04/15	08/05/15 12:47	150804L07
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
Lead		17.5		0.490	0.980		
SCH-11-1D-01	15-08-0208-21-A	07/07/15 08:20	Solid	ICP 8300	08/04/15	08/05/15 12:48	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		481		0.495	0.990		
SCH-11-1D-03	15-08-0208-22-A	07/07/15 08:21	Solid	ICP 8300	08/04/15	08/05/15 12:49	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		220		0.505	1.01		
SCH-11-2D-01	15-08-0208-23-A	07/07/15 08:25	Solid	ICP 8300	08/04/15	08/05/15 12:52	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		688		0.481	0.962		
SCH-11-2D-03	15-08-0208-24-A	07/07/15 08:26	Solid	ICP 8300	08/04/15	08/05/15 12:53	150804L08
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		450		0.513	1.03		



Advanced GeoServices Corporation	on		Date Re	ceived:			08/04/15
1055 Andrew Drive, Suite A			Work O	15-08-0208			
West Chester, PA 19380-4293			Prepara		EPA 3050B		
			Method:				EPA 6010B
			Units:				mg/kg
Project: Exide Vernon Offsite / 201	3-3007-09					Pa	age 4 of 5
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SCH-11-3D-01	15-08-0208-25-A	07/07/15 08:30	Solid	ICP 8300	08/04/15	08/05/15 12:53	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		80.8		0.513	1.03		
SCH-11-3D-03	15-08-0208-26-A	07/07/15 08:31	Solid	ICP 8300	08/04/15	08/05/15 12:54	150804L08
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Lead		85.2		0.508	1.02		
SCH-11-4D-01	15-08-0208-27-A	07/07/15 08:35	Solid	ICP 8300	08/04/15	08/05/15 12:55	150804L08
<u>Parameter</u>	,	Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		31.9		0.476	0.952		
SCH-11-4D-03	15-08-0208-28-A	07/07/15 08:36	Solid	ICP 8300	08/04/15	08/05/15 12:56	150804L08
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
Lead		28.8		0.510	1.02		
SCH-11-5D-01	15-08-0208-29-A	07/07/15 08:40	Solid	ICP 8300	08/04/15	08/05/15 12:57	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Lead		29.4		0.510	1.02		
SCH-11-5D-03	15-08-0208-30-A	07/07/15 08:41	Solid	ICP 8300	08/04/15	08/05/15 12:58	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		29.2		0.498	0.995		
SCH-13-1D-01	15-08-0208-31-A	07/07/15 10:25	Solid	ICP 8300	08/04/15	08/05/15 12:58	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		183		0.490	0.980		
SCH-13-2D-01	15-08-0208-32-A	07/07/15 10:30	Solid	ICP 8300	08/04/15	08/05/15 12:59	150804L08
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Lead		144		0.510	1.02		



Lead

#### **Analytical Report**

Advanced GeoServices Corporation	on		Date Re	ceived:			08/04/15						
1055 Andrew Drive, Suite A	-		Work Or	der:			15-08-0208						
West Chester, PA 19380-4293			Prepara	tion:			EPA 3050B						
			Method: EPA 6										
			Units:				mg/kg						
Project: Exide Vernon Offsite / 201	13-3007-09					Pa	age 5 of 5						
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID						
SCH-13-3D-01	15-08-0208-33-A	07/07/15 10:35	Solid	ICP 8300	08/04/15	08/05/15 13:02	150804L08						
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers						
Lead		25.8		0.485	0.971								
SCH-13-4D-01	15-08-0208-34-A	07/07/15 10:40	Solid	ICP 8300	08/04/15	08/05/15 13:03	150804L08						
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers						
Lead		29.8		0.515	1.03								
SCH-13-5D-01	15-08-0208-35-A	07/07/15 10:45	Solid	ICP 8300	08/04/15	08/05/15 13:04	150804L08						
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers						
Lead		37.9		0.518	1.04								
Method Blank	097-01-002-21548	N/A	Solid	ICP 8300	08/04/15	08/05/15 12:19	150804L07						
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers						
Lead		ND		0.500	1.00								
Method Blank	097-01-002-21549	N/A	Solid	ICP 8300	08/04/15	08/05/15 12:20	150804L08						
Parameter		Result		alifiers									

ND

0.500

1.00



#### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

Work Order:

15-08-0208

West Chester, PA 19380-4293

Preparation:

EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 1 of 2

Quality Control Sample ID	Туре		Matrix	Insti	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
SCH-07-1D-01	Sample		Solid	ICP	8300	08/04/15	08/05/15 12:2		150804S07	
SCH-07-1D-01	Matrix Spike		Solid	olid ICP 8		08/04/15	08/05/15	12:24	150804S07	
SCH-07-1D-01	Matrix Spike	Duplicate	Solid	ICP	8300	08/04/15	08/05/15	12:24	150804S07	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	35.70	25.00	59.58	96	58.69	92	75-125	2	0-20	





#### **Quality Control - Spike/Spike Duplicate**

Advanced GeoServices Corporation

Date Received:

Work Order:

15-08-0208

West Chester, PA 19380-4293

Preparation:

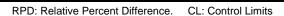
EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 2 of 2

Quality Control Sample ID	Type		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	tch Number
SCH-11-1D-01	Sample		Solid	ICP	8300	08/04/15	08/05/15 12:4		150804S08	
SCH-11-1D-01	Matrix Spike		Solid	ICP	8300	08/04/15	08/05/15	12:25	150804S08	
SCH-11-1D-01	Matrix Spike Duplicate		Solid	ICP	8300	08/04/15	08/05/15	12:26	150804S08	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	481.2	25.00	413.8	4X	295.5	4X	75-125	4X	0-20	Q





#### **Quality Control - LCS**

Advanced GeoServices Corporation

Date Received: 08/04/15

Work Order: 15-08-0208

West Chester, PA 19380-4293

Preparation: EPA 3050B

Method: EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09

Page 1 of 2

Quality Control Sample ID	Туре	Matrix	Instrument D	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-21548	LCS	Solid	ICP 8300 0	08/04/15	08/05/15 12:21	150804L07
<u>Parameter</u>		Spike Added	Conc. Recovered	ed LCS %Re	ec. %Rec	. CL Qualifiers
Lead		25.00	26.19	105	80-120	)



#### **Quality Control - LCS**

Advanced GeoServices Corporation

Date Received:

Work Order:

15-08-0208

West Chester, PA 19380-4293

Preparation:

EPA 3050B

Method:

EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09 Page 2 of 2

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-21549	LCS	Solid	ICP 8300	08/04/15	08/05/15 12:22	150804L08
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec	. CL Qualifiers
Lead		25.00	25.92	104	80-120	)





## **Sample Analysis Summary Report**

Work Order: 15-08-0208				Page 1 of 1
Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	935	ICP 8300	1



#### **Glossary of Terms and Qualifiers**

Work Order: 15-08-0208 Page 1 of 1

<b>Qualifiers</b>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
В	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.

- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- X % Recovery and/or RPD out-of-range.
- Z Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Page 1 of 3

# ADVANCED GEOSERVICES CORP. **CHAIN OF CUSTODY**

Project Name: Exide Vernon Offsite

1055 Andrew Dr. Suite A West Chester, PA 19380 tel 610.840.9100 AGC Contact: Adam Doubleday

Turnaround Time (circle one) Standard 5-Day 72-Hour (24-Hour Lab Name/Location: Calscience, Garden Grove, CA

Project # 2013-3007-09

15-08-0208

courier pick-up

Results only Results/QC summary LLP-Like Deliverables (circle one) Shipment Tracking # Shipment #

<b>,</b>		,	<del>,</del>									·		·····	<del>-)</del>	<del></del>	1	
REMARKS	Invoice to Exide														,		9/91	
	Preservatives																Date/Time: 9/4/19	,
																	1/8	10
																	l'ime:	Date/Time: 1
ANALYSIS																	Date/	7040
ANA																	) :	
																	( )	9
	Lead	×	×	X	X	X	X	X	X	×	X	X	X	X	X	X	٠	
	eraintaine #			1		1				1		-		_	1	1		
<u> </u>	Field Filtered	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	///	21
	xirtaM	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	M MAN	//
	Sample Type (C or G)	g	G	G	Ð	g	G	G	Ð	G	g	G	g	G	Ð	G	0	
	Time	316	916	617	926	921	922	925	286	223	930	931	932	585	936	637	Received By:	
	Date	7/ 6 /15	7/ 6 /15	7/ 6 /15	7/ 6 /15	7/ 6 /15	7/ 6 /15	7/ 6 /15	7/ 6 /15	7/ 6 /15	1/ 6 /16	71/ 6/17	1/ 6 /18	1/ 6 /19	7/ 6 /20	7/ 6 /21	I	
	<b>Q</b>	10	03	90	10	03	96	10	03	90	01	80	90-	0(	63	90	Has	11 110
	Sample ID	SCH-07-10-01	SCH- 67- 10-03	90 - 01 - 10 - HDS	4 SCH-07-20-01	SCH- 07 - 20 - 03	90-02-69-HJS	SCH-07 - 30 - 01	SCH-07 - 30 - 03	30 - 06 - 60-HJS	SCH-07-46-01	SCH-07 - 40 -	SCH-07-40-	SCH- 67 - 50 - 1	9 - 05 - 70 - HJS	3-05-70-HJS	Relinquished By:	
<b>-</b>	Lab Use Only		2	8	F	Ü	9	1	8		0	1	7	12	7-	5	Reling	•
				•		<b></b>		·			·		<b></b>		•		•	

Preservative: 1-ice, 2- H<sub>2</sub>SO<sub>4</sub>, 3-HCl, 4-HNO<sub>3</sub>, 5-NaOH, 6-ZnOAC

Sample Matrix: SW - Surface Water, GW - Groundwater, Sed - Sediment, S - Soil, Sid - Sludge, A - Air C: Users/bathDesktoplExide Vernonl'Test Borings/Chain of Custody - Feed Room Bag



Page 2 of 3

# ADVANCED GEOSERVICES CORP. CHAIN OF CUSTODY

Project Name: Exide Vernon Offsite AGC Contact: Adam Doubleday

1055 Andrew Dr. Suite A West Chester, PA 19380 tel 610.840.9100

Turnaround Time (circle one) Standard 5-Day 72-Hour (24-Hour Lab Name/Location: Calscience, Garden Grove, CA

Deliverables (circle one) Project # 2013-3007-09 Shipment Tracking# Shipment #

courier pick-up



OLP-Like Results only Results/QC summary

		I		T	<u> </u>	Γ		l	Γ	Γ	l -	Γ		<u> </u>	<u> </u>	·	1	
REMARKS	Invoice to Exide																Date/Time: 8/4 /5 (6/6	Date/Time:
	Preservatives																15	1
																	17/8	(
																	ime:	1
ANALYSIS																	Date/Ti	, T
ANA																		,
	,																) W	
	Lead	X	X	X	X	X	×	X	X	×	×	×	X	×	×	X	W.	
	# of Containers		I	1	1	teresed	1	-		1	1		1	1	1	Ī		
	Field Filtered	N	N	N	N	Z	Z	N	Z	Z	Z	Z	Z	Z	Z	N	6	-
<u> </u>	xirtsM	S	S	S	S	S	S	S	S	S	S	သ	S	S	S	S	8	1
	Sample Type (C or G)	Ð	Ð	Ð	Ð	Ð	Ð	Ð	Ð	Ð	Ð	ŋ	Ð	Ð	Ð	Ð	Q	
	Time	1227	1232	1237	1242	1247	820	४७१	825	826	830	831	8 3C	328	840	128	Received By:	
		/15	/15	/15	/15	/15	/15	/15	/15	/15	/15	/15	/15	/15	/15	/15	, ,	
	Date	7/ 6 /15	6 /15	7/ 6 /15	6 /15	7/ 6 /15	7/ 7 /15	7/ 7 /15	7/ 7 /15	L //	7/ 7 /15	7/ 7 /15	7/ 7 /15	7/ 7 /15	1 1	L //		
		//	//	//_	//	//_	//_	//	//	//_	//_	//_	//	//_	//_	//_		
																	١	///
	le ID	.06	-20-06-	-06	90-	-06	10-	0 3	- 01	6 3	10-	03	10	03	10	५ ०	Int.	1011
	Sample ID	10	20	.30	<b>₩-</b>	50	10-01	- 01	30.	20 -	30 -	30-03	10-01	-01	50-01	50-03	In which	
	$\infty$	- 6(		- 6		- 61	-	•	•	١,	١	1		1-5	,	5-1	.:	
		6 SCH- 69 - 10 - 06	SCH- 0 ዓ	8 SCH- 0 4	6 0-H2S	20 - SCH- 09 - 50 -06	> / SCH- 11 -	12 SCH- 11	SCH- 11	SCH- 11	SCH- II	SCH- 11	SCH- 11 -	8 SCH-11-40-03	SCH- 11	30 SCH- 11 -	/ Relinquished By:	-
	Lab Use Only	16 s	17 S	s/8/	198	20 S	> / S	22 8	2 8	S t	SX	26 S	27 8	S 82	8 8 S	s ar	Relinqui	Dalling Strate of Den

Preservative: 1-ice, 2-H<sub>2</sub>SO<sub>4</sub>, 3-HCl, 4-HNO<sub>3</sub>, 5-NaOH, 6-ZnOAC

Sample Matrix: SW - Surface Water, GW - Groundwater, Sed - Sediment, S - Soil, Sid - Sludge, A - Air C:UsersjbattDesktoptExide Vernon'Test Borings/Chain of Custody - Feed Room Bag



Date/Time:\_ Date/Time:

173

Received By: Received By:

Page 3 of 3

# ADVANCED GEOSERVICES CORP. CHAIN OF CUSTODY

Project # 2013-3007-09

Shipment #

Deliverables (circle one) Shipment Tracking #

Turnaround Time (circle one) Standard 5-Day 72-Hour (24-Hour

Lab Name/Location: Calscience, Garden Grove, CA

Project Name: Exide Vernon Offsite AGC Contact: Adam Doubleday

1055 Andrew Dr. Suite A West Chester, PA 19380

tel 610,840,9100

20

courier pick-up

OLP-Like

Results only Results/QC summary

								_	· -	<u> </u>	Т	-			Т	T			7
NEWKIND	Invoice to Exide			,	e de la companya de La companya de la companya de													1	
	Preservatives										I		I		T		Ι		
					And the state of t														
ANALYSIS					And the second s								1						_
NV V										+			lacksquare						
	Lead	×	X	×	×	×	×	K	¥	ļ	;	į	k	k		<b>1</b>	k	×	4
	ensinistra 10 %	-	-		Section of Contraction of Contractio	_	F	-	1	H	-		F	F	1	1	F	-	-
	bereifi Field	z	Z	Z	Z	Z	;	2	1	7	7		Z	2		Z	Ł	Z	-
	xirtsM	S	S	S	S	$\mathbf{s}$	7	2	4	4	C		S	ľ		2	Ω	Ø.	<b>&gt;</b>
	Sample Type (C or G)	g	g	g	g	g	Ú	þ	D	ļ.			5			2	þ	۲	>
	Time	1025	1030	1035	0,01	1045													
	Date	7/ 7 /15	21/ 7 /15	7/ 7 /15	7/7/115	7/7 /15	7/ /15	CI/ //	31,			CI <i>1</i> //	C1/ //			CI/ //	C1/ //		
	Sample ID	SCH-13 - 10 - 61	SCH-13-20-61	3 SCH-13-30-01			-U06			CONT		יייי	SCH			N : -	SCII	הוסט	
	Lab Use Only	1/2	72	33,	1	325		3,		Ĭ		- 1	<b>4</b> 2						_
<del></del>					- 1 3														

Preservative: 1-ice, 2- H2SO4, 3-HCl, 4-HNO3, 5-NaOH, 6-ZnOAC

Relinquished By: Relinquished By: Sample Matrix: SW - Surface Water, GW - Groundwater, Sod - Sediment, S - Soil, Sld - Sludge, A - Air CAlsers/teat/DaskroptRixide Vennon/Yest Borings/Chain of Custody - Feed Room Bag

Return to Contents

Calscience

WORK ORDER NUMBER: 15-08-

### SAMPLE RECEIPT CHECKLIST

CODD

CLIENT: ADVANCED GEDSERVICES LURK	ATE: 08	14-1	/ 2015
TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  Thermometer ID: SC5 (CF:-0.2°C); Temperature (w/o CF):		Sampl	
CUSTODY SEAL:  Cooler ☐ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A  Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A		ed by: ed by: <u>/</u>	
SAMPLE CONDITION:  Chain-of-Custody (COC) document(s) received with samples  COC document(s) received complete  ☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers  ☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished times.	🗹	No .	N/A
Sampler's name indicated on COC Sample container label(s) consistent with COC Sample container(s) intact and in good condition Proper containers for analyses requested			
Sufficient volume/mass for analyses requested  Samples received within holding time  Aqueous samples for certain analyses received within 15-minute holding time	🗹		
□ pH □ Residual Chlorine □ Dissolved Sulfide □ Dissolved Oxygen			<b>a</b>
Container(s) for certain analysis free of headspace  ☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)  ☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)  Tedlar™ bag(s) free of condensation			
CONTAINER TYPE:       (Trip Blank Lot Nun Aqueous: □ VOA □ VOAh □ VOAna₂ □ 100PJ □ 100PJna₂ □ 125AGB □ 125AGBh □ 125AGBh □ 125AGBh □ 125PBznna □ 250AGB □ 250CGB □ 250CGBs □ 250PB □ 250PBn □ 500AGB □ 500AGB	nber: 5AGBp	125PB AGJ <b>s</b>	
□ 500PB □ 1AGB □ 1AGBna₂ □ 1AGBs □ 1PB □ 1PBna □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Resealable B	ag ed by: _ <i>[</i>	1013