



Matthew Rodriguez
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 4, 2015

Mr. Russ Guiney, Director
Los Angeles County Park and Recreation
433 South Vermont Ave
Los Angeles, California 90020

REPORT ON SOIL SAMPLING FOR LEAD AT PARQUE DE LOS SUEÑOS, LOS ANGELES, CALIFORNIA

Dear Mr. Guiney:

The Department of Toxic Substances Control (DTSC) is pleased to present this letter report regarding the sampling and laboratory analysis for lead for soils recently collected at Parque de Los Sueños. Parque de Los Sueños is located at 1333 South Bonnie Beach Place, Los Angeles, California. The soils collected and analyzed at Parque de Los Sueños did not contain concentrations of lead above California State regulatory thresholds. It is DTSC's opinion that the concentrations of lead found in soils at Parque de Los Sueños do not constitute a threat to human health or the environment.

The soil sampling work at Parque De Los Sueños was performed following a DTSC order instructing Exide Technologies Corporation (Exide) to sample and test soils for lead at select residences, and all parks and schools located within areas referred to as the *Expanded Areas* located north and south of the non-operating Exide Vernon battery recycling facility. Exide's consultant [Advanced GeoServices Corporation (AGC)] subsequently submitted a series of draft sampling plans, and on August 5, 2014, DTSC approved a final version of a sampling plan titled "*Addendum to the November 15, 2013 Work Plan for Off-Site Soil Sampling*", which is dated July 26, 2014 (Plan).

On March 31, 2015, Avocet Environmental Incorporated (Avocet), collected soils samples from five locations at Parque de Los Sueños. The sampling effort by Avocet was overseen in the field by representatives from DTSC and the Los Angeles County Public Health Department to ensure that the sampling conformed to the July 2014 Plan and with standard environmental sampling practices. The sampling work is further documented in the attached Avocet Report (Report), dated April 17, 2015. The location of the five sampling sites can be found on PDF Page 8 of the Report. A total of 25 samples were collected from five locations at the five different soil levels. One composite sample was created from each designated depth interval (0 to 1 inch, 1 to 3 inch, 3 to 6 inch, 6 to 12 inch and 12 to 18 inch) associated with the five locations at Parque de Los Sueños and given a unique sample number. For example, the samples PAR-04-01 and PAR-04-03 (see enclosed Avocet report) represent

the park name (PAR-04 for Parque de Los Sueños) and the composite sample interval subject to laboratory analysis (01 for the 0 to 1 inch interval, 03 for the 1 to 3 inch interval, etc.). The samples were shipped via standard protocol under a legal chain-of-custody to Eurofins Calscience for analysis. Eurofins Calscience is located in Garden Grove, California and is certified under the California State Environmental Laboratory Accreditation Program (ELAP). The composite samples were prepared and analyzed for total lead in accordance with EPA Methods 3050B and 6010B, respectively. The 25 discrete samples have been archived for future use, if necessary. The results of the sampling are shown on the table below.

PARQUE DE LOS SUENOS COMPOSITE SAMPLE RESULTS FOR LEAD			
Sample & Depth	CHHSL *	Composite Soil Sample Results*	Exceedance?
PAR-04-01 (0-1")	80	42.1	No
PAR-04-03 (1-3")	80	34.2	No
PAR-04-06 (3-6")	80	38.1	No
PAR-04-12 (6-12")	80	25.3	No
PAR-04-18 (12-18")	80	46.5	No

* Concentrations in parts-per-million (ppm)

The Office of Environmental Health Hazard Assessment (OEHHA) has established a California Human Health Screening Level (CHHSL) for lead in soils to be 80 parts-per-million (ppm). It should be noted that OEHHA identifies this screening number as solely an advisory number that has no regulatory effect and is intended to enable citizen groups, community organizations, property owners, developers, and local government officials to estimate the degree of effort that may be necessary to remediate a contaminated property (OEHHA website). Based on our review of the data, none of the composite samples collected at Parque de Los Sueños were above 80 ppm. The concentrations of lead in soils at Parque de Los Sueños (as shown in the table above ranging from 25.3 ppm to 46.5 ppm, and as stated earlier) do not constitute a threat to human health or the environment.

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

Sincerely,



Peter Ruttan
Project Manager
Office of Permitting

Enclosure
cc: Next page

Mr. Russ Guiney

May 4, 2015

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cc: (via email)

Ms. Diane Thorne, Los Angeles County

Ms. Joan Rupert, Los Angeles County

Ms. Teresa Villegas, Los Angeles County

Mr. Frank Gonzales, Los Angeles County

Ms. Sofia Gavia, Los Angeles County

Mr. Angelo Bellomo, Los Angeles County

Mr. Cyrus Rangan, Los Angeles County

Mr. Casey Youn, Esq., Los Angeles County

Ms. Grace Chang, Esq., Los Angeles County

Ms. Claudia Gutiérrez, Esq., Los Angeles County

Ms. Kathline King, Los Angeles County

Ms. Norma García, Los Angeles County

Mr. John Wicker, Los Angeles County

Mr. Tom Strang, Exide

Mr. Fred Ganster, Exide

Mr. John Hogarth, Exide

Mr. Paul Stratman, Advanced GeoServices

Ms. Barbara Forslund, Advanced Geo Services

Mr. Randy Visser, Sheppard Mullin

Mr. Rizgar Ghazi, DTSC

Ms. Suhasini Patel, DTSC

Ms. Marina Perez, DTSC

Mr. Todd Wallbom, DTSC



Matthew Rodriguez
Secretario de Protección
Ambiental



Departamento de Control de Sustancias Tóxicas

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



Edmund G. Brown Jr.
Gobernador

4 de mayo de 2015

Mr. Russ Guiney, Director
Los Angeles County Park and Recreation
433 South Vermont Ave
Los Angeles, California 90020

INFORME SOBRE MUESTREO DE SUELOS PARA PLOMO EN EL PARQUE DE LOS SUEÑOS, LOS ÁNGELES, CALIFORNIA

Estimado Sr. Guiney:

El Departamento de Control de Sustancias Tóxicas (DTSC, por sus siglas en inglés) se complace en presentar esta carta de informe sobre el muestreo y análisis de laboratorio para plomo en los suelos recientemente recogido en el Parque de Los Sueños. El Parque de Los Sueños se encuentra en 1333 South Bonnie Beach Place, Los Ángeles, California. Los suelos recogidos y analizados en el Parque de Los Sueños no contenían concentraciones de plomo más allá de los umbrales de regulación del Estado de California. Es la opinión de DTSC que las concentraciones de plomo encontradas en los suelos en el Parque de Los Sueños no constituyen una amenaza para la salud humana o el medio ambiente.

El trabajo de muestreo de suelos en el Parque De Los Sueños se realizó siguiendo una orden de DTSC instruyendo a Exide Technologies Corporation (Exide) muestrear y revisar los suelos para plomo en ciertas residencias, y todos los parques y escuelas ubicadas dentro de las áreas denominadas *Áreas Ampliadas* situadas al norte y al sur de la instalación no operativa de reciclaje de baterías Exide Vernon. El consultor de Exide [Advanced GeoServices Corporation (AGC)] posteriormente presentó un borrador de una serie de planes de muestreo, y el 5 de agosto del 2014, DTSC aprobó una versión final de un plan de muestreo titulada "*Adendum al Plan de Trabajo para Muestreo de Suelos Fuera del Sitio del 15 de noviembre del 2013*", la cual está fechada el 26 de julio del 2014 (Plan).

El 31 de marzo del 2015, Avocet Environmental Incorporated (Avocet), recogió muestras de suelos de cinco ubicaciones en el Parque de Los Sueños. El esfuerzo de muestreo por Avocet fue supervisado en el campo por representantes de DTSC y el Departamento de Salud Pública del Condado de Los Ángeles para asegurar que el muestreo se ajustaba al Plan de julio del 2014 y las prácticas de muestreo ambiental estándar. El trabajo de muestreo se documenta con más detalle en el Informe de Avocet adjunto (Informe), fechado el 17 de abril del 2015. La ubicación de los cinco sitios de muestreo se puede encontrar en la Página 8 del Informe PDF. Un total de 25 muestras se obtuvieron de cinco lugares en los cinco niveles de suelo diferentes. Una muestra compuesta fue creada de cada uno de los intervalos de profundidad designados (de 0 a 1 pulgada, de 1 a 3 pulgadas, de 3 a 6 pulgadas, de 6 a 12 pulgadas y de 12 a 18 pulgadas) asociados con los cinco lugares en el Parque de Los Sueños y se le dio un único número de muestra. Por ejemplo, las muestras PAR-04-01 y PAR-04-03 (ver informe adjunto de Avocet) representan el nombre del parque (PAR-04 para el Parque de Los Sueños) y el intervalo de muestra compuesto sujeto a análisis de laboratorio (01 para el intervalo de de 0 a 1 pulgada, 03 para el intervalo de 1 a

Mr. Russ Guiney
4 de mayo del 2015
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3 pulgadas, etc.). Las muestras se envaron a través del protocolo estándar bajo una cadena de custodia legal a Eurofins Calscience para su análisis. Eurofins Calscience se encuentra en Garden Grove, California, y está certificada bajo el Programa de Acreditación de Laboratorios Ambientales Estatales de California (ELAP, por sus siglas en inglés). Las muestras compuestas se prepararon y analizaron para plomo total de acuerdo con Métodos 3050B y 6010B de EPA, respectivamente. Las 25 muestras aisladas han sido archivadas para su uso futuro, si es necesario. Los resultados de los muestreos se muestran en la siguiente tabla.

RESULTADOS COMPUESTOS DE MUESTRAS PARA PLOMO DEL PARQUE DE LOS SUEÑOS			
Muestra y Profundidad	CHHSL *	Resultados Compuestos de Muestras de Suelos*	¿Excedencia?
PAR-04-01 (0-1")	80	42.1	No
PAR-04-03 (1-3")	80	34.2	No
PAR-04-06 (3-6")	80	38.1	No
PAR-04-12 (6-12")	80	25.3	No
PAR-04-18 (12-18")	80	46.5	No

* Concentraciones en partes por millón (ppm)

La Oficina de Evaluación de Riesgos de Salud Ambiental (OEHHA, por sus siglas en inglés) ha establecido un Nivel de Selección para la Salud Humana de California (CHHSL, por sus siglas en inglés) para el plomo en los suelos de 80 partes por millón (ppm, por sus siglas en inglés). Cabe señalar que OEHHA identifica este número de selección sólo como un número de asesoramiento que no tiene ningún efecto regulador y tiene por objeto permitir a grupos de ciudadanos, organizaciones comunitarias, propietarios, urbanizadores y funcionarios del gobierno local estimar el grado de esfuerzo que puede ser necesario para remediar una propiedad contaminada (página web OEHHA). Basados en nuestra revisión de los datos, ninguna de las muestras compuestas recogidas en el Parque de Los Sueños estaban más allá de 80 ppm. Las concentraciones de plomo en los suelos en el Parque de Los Sueños (como se muestra en la tabla anterior que va desde 25.3 ppm a 46.5 ppm, y como se dijo anteriormente) no constituyen una amenaza para la salud humana o el medio ambiente.

Si usted tiene alguna pregunta sobre esta carta, por favor comuníquese conmigo en Peter.Ruttan@dtsc.ca.gov ó (916) 255-3630.

Atentamente,



Peter Ruttan
Gerente de Proyecto
Oficina de Permisos

Adjunto
cc: Página siguiente

Mr. Russ Guiney
4 de mayo del 2015
Página 3

cc: (por correo electrónico)
Ms. Diane Thorne, Los Angeles County
Ms. Joan Rupert, Los Angeles County
Ms. Teresa Villegas, Los Angeles County
Mr. Frank Gonzales, Los Angeles County
Ms. Sofia Gavia, Los Angeles County
Mr. Angelo Bellomo, Los Angeles County
Mr. Cyrus Rangan, Los Angeles County
Mr. Casey Youn, Esq., Los Angeles County
Ms. Grace Chang, Esq., Los Angeles County
Ms. Claudia Gutierrez, Esq., Los Angeles County
Ms. Kathline King, Los Angeles County
Ms. Norma Garcia, Los Angeles County
Mr. John Wicker, Los Angeles County
Mr. Tom Strang, Exide
Mr. Fred Ganster, Exide
Mr. John Hogarth, Exide
Mr. Paul Stratman, Advanced GeoServices
Ms. Barbara Forslund, Advanced Geo Services
Mr. Randy Visser, Sheppard Mullin
Mr. Rizgar Ghazi, DTSC
Ms. Suhasini Patel, DTSC
Ms. Marina Pérez, DTSC
Mr. Todd Wallbom, DTSC

April 30, 2015

2013-3007-12

Ms. Diane Thorne
Los Angeles County Department of Parks and Recreation
Land Management and Compliance
510 South Vermont Avenue
Los Angeles, CA 90020-1975

RE: Soil Sampling Results, Parque de los Suenos

Dear Ms. Thorne:

Enclosed are the results of the soil sampling and laboratory analysis that was performed on behalf of Exide Technologies, Inc., on March 31, 2015 at Parque de los Suenos in Los Angeles County. I am pleased to inform you that the lead results for all samples are below the California Department of Toxic Substances Control residential soil screening value of 80 mg/kg.

Please let me know if you have any questions regarding these results. Thank you for your assistance in completing this sampling effort.

Respectfully submitted,

ADVANCED GEOSERVICES CORP.



Barbara L. Forslund
Project Manager

BLF:vm

Enclosures

cc: Peter Ruttan, DTSC
John Hogarth, Exide
Tom Strang, Exide
Paul Stratman, Advanced GeoServices
Randy Visser, Sheppard Mullin
Joan Rupert, Los Angeles County
Teresa Villegas, Los Angeles County
Frank Gonzales, Los Angeles County
Sofia Gavia, Los Angeles County
Angelo Bellomo, Los Angeles County
Cyrus Rangan, Los Angeles County
Casey Yourn, Esq., Los Angeles County
Grace Chang, Esq., Los Angeles County
Claudia Gutierrez, Esq., Los Angeles County
Kathline King, Los Angeles County
Norma Garcia, Los Angeles County
John Wicker, Los Angeles County
Russ Guiney, Los Angeles County



ATTACHMENT 1

Sampling Trip Report



April 29, 2015

Project No. 1325.007

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

Transmitted via email: bforslund@advancedgeoservices.com

Soil Sampling at Parque de los Sueños
1333 South Bonnie Beach Place
Los Angeles, California

Dear Ms. Forslund:

This letter report documents the soil sampling conducted at Parque de los Sueños (the park) on March 31, 2015. The park is located at 1333 South Bonnie Beach Place in Los Angeles, California and is shown on the site location map (Figure 1). The work described herein was conducted as a part of the offsite soil assessments being conducted in association with the Exide Technologies facility in Vernon, California.

REGULATORY OVERSIGHT

Representatives from the Los Angeles County Department of Parks and Recreation, Los Angeles County Department of Public Health, and the California Department of Toxic Substances Control (DTSC) were onsite to observe the sampling event conducted at the park. Mr. Todd Wallbom, P.G., with the DTSC, and Mr. Deke Siren, P.G., Project Manager with Avocet Environmental, Inc. (Avocet), were present to address questions from the County representatives.

FIELD METHODS

Avocet was retained by Advanced GeoServices Corp. (AGC) to collect shallow soil samples at depths of approximately 1 inch, 3 inches, 6 inches, 12 inches, and 18 inches below grade at five unique boring locations within the grassy portion of the park. The approximate locations and unique sampling identifications of the soil borings are illustrated in Figure 2.

Representative soil samples were first collected 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 boring number, depth, and time the sample was collected. Each shallow boring was backfilled upon completion with soil cuttings, tamped for light compaction, and, if necessary, topped with planting soil to match grade. Sampling tools were decontaminated between each boring by washing with laboratory-grade, phosphate-free detergent and then triple-rinsed using deionized water, followed by a rinse with 10 percent nitric acid solution, and final rinse with deionized water. Fresh nitrile gloves were donned by field personnel between each boring and as necessary to prevent cross-contamination between soil samples.

Soil Sampling at Parque de los Sueños

1333 South Bonnie Beach Place
Los Angeles, California

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April 29, 2015

Composite samples for laboratory analysis were then collected by measuring equal portions of soil from each of the five discrete soil samples collected at a given depth and then mixing the sample aliquots thoroughly in a sealed plastic bag. A smaller portion of the mixed composite sample was then transferred into a unique plastic bag that was sealed, labeled, and placed in a cooler on ice pending delivery to the analytical laboratory that same day. In all, five composite samples, one duplicate, and one equipment blank were collected for laboratory testing. One split sample was provided to DTSC.

The composite soil samples and equipment blank were submitted under appropriate chain of custody to Eurofins Calscience, a certified environmental laboratory located in Garden Grove, California. The discrete soil samples were placed in a container and will be retained for 180 days at room temperature in accordance with EPA Method 6010B/6020. The discrete soil samples are currently stored at the Exide facility, and DTSC will be notified before disposing of the samples.

NOTABLE OBSERVATIONS

Mr. Michael R. Lewis, P.G. (Avocet) and Mr. Wallbom together inspected some of the soil generated during the sampling and noted a variety of debris, e.g., paper, gravel, and rubber fragments, in the soil. Mr. Lewis and Mr. Wallbom discussed their observations and agreed that the soil was inconsistent with soil encountered at borings advanced on a variety of other properties in the site vicinity and that the soil in the park had characteristics of imported or engineered fill material. According to a report by Rubicon Engineering Corporation approximately 1.26 acres of the former Univar Chemical Company property (Univar), which included a former truck and vehicle parking areas at the northern end of the former Univar facility, was transferred to the Los Angeles Community Development Department (LACDD) in November 2002 (Rubicon, May 26, 2006). The majority of the parcel transferred to LACDD was converted into a community park.

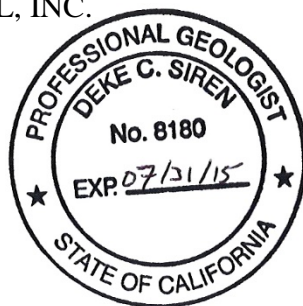
If you have any questions regarding this letter or require additional information, please do not hesitate to call.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.



Deke Siren, P.G.
Project Manager



DCS:sh
Attachments

P:\1325 AGC-Exide_Vernon\007_Offsite Soil Sampling\Parque de Los Suenos\PaqueSuenos_2015-04-29.docx



REFERENCES

Rubicon Engineering Corporation (Rubicon), May 26, 2006, “Progress Report July through December 2005 Subsurface Characterization and Interim Remediation, Former Univar USA Inc. Facility, 1363 South Bonnie Beach Place, Los Angeles, California.”

Figures



SAMPLE LOCATIONS

Scale: 1" = ~ 80'



ATTACHMENT 2

Sample Results

EXIDE VERNON
2014 - 2015 Residential Sampling, 3/31/15
Calscience# 15-04-0069 Project# 2013-3007

Sample ID	Lab ID	Sample Date	Matrix	Remarks	Parameter	Units	Result	Q	RL
PAR-04-01	15-04-0069-001	3/31/2015	Soil	Composite	Lead	mg/kg	42.1		0.503
PAR-04-03	15-04-0069-002	3/31/2015	Soil	Composite	Lead	mg/kg	34.2		0.481
PAR-04-06	15-04-0069-003	3/31/2015	Soil	Composite	Lead	mg/kg	38.1		0.478
PAR-04-12	15-04-0069-004	3/31/2015	Soil	Composite	Lead	mg/kg	25.3		0.505
PAR-04-18	15-04-0069-005	3/31/2015	Soil	Composite	Lead	mg/kg	46.5		0.495

QA Scientist



Date 4/15/2015

DATA VALIDATION SUMMARY

Level I

Site Name: Exide Vernon Laboratory: Calscience
 Project Number: 2013-3007 Case/Order/SDG #: 15-04-0069
 Sampling Date(s): 3/31/2015

Compound List: Lead

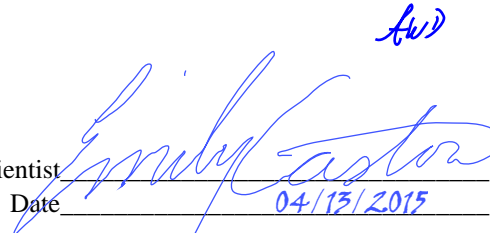
Method: 6010

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			
Blank Analysis	X			
Field Duplicate Analysis				NA
Surrogate Recoveries				NA
Matrix Spike Analysis (MS/MSD)	X			
Laboratory Control Sample Analysis (LCS)	X			
Laboratory Duplicate Analysis				NA
Overall Assessment of Data	X			
Other:				

General Comments: cooler temp: 3.2C

Accept - No qualification required.
 FYI - For your information only, no qualification necessary.
 Qualify - Qualify as rejected, estimated or biased.
 NR - Not Reviewed
 NA - Not Applicable


 QA Scientist _____
 Date 04/13/2015

Analytical Report

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

Date Received: 04/01/15
 Work Order: 15-04-0069
 Preparation: EPA 3050B
 Method: EPA 6010B
 Units: mg/kg

Project: Exide Vernon Offsite / 2013-3007-09

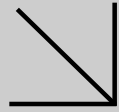
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PAR-04-01	15-04-0069-1-A	03/31/15 08:59	Solid	ICP 8300	04/06/15	04/09/15 12:37	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		42.1		0.503		1.01	
PAR-04-03	15-04-0069-2-A	03/31/15 09:03	Solid	ICP 8300	04/06/15	04/09/15 12:38	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		34.2		0.481		0.962	
PAR-04-06	15-04-0069-3-A	03/31/15 09:08	Solid	ICP 8300	04/06/15	04/09/15 12:40	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		38.1		0.478		0.957	
PAR-04-12	15-04-0069-4-A	03/31/15 09:13	Solid	ICP 8300	04/06/15	04/09/15 12:41	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.3		0.505		1.01	
PAR-04-18	15-04-0069-5-A	03/31/15 09:19	Solid	ICP 8300	04/06/15	04/09/15 12:42	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		46.5		0.495		0.990	
Method Blank	097-01-002-20748	N/A	Solid	ICP 8300	04/06/15	04/07/15 14:27	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.476		0.952	

Return to Contents

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

SL
 04/13/2015



WORK ORDER NUMBER: 15-04-0069

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

Amanda Porter

Approved for release on 04/09/2015 by:
Amanda Porter
Project Manager

ResultLink ▶

Email your PM ▶



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: 15-04-0069

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6	Chain-of-Custody/Sample Receipt Form.	9

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/01/15. They were assigned to Work Order 15-04-0069.

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.

Analytical Report

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

Date Received: 04/01/15
 Work Order: 15-04-0069
 Preparation: EPA 3050B
 Method: EPA 6010B
 Units: mg/kg

Project: Exide Vernon Offsite / 2013-3007-09

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
PAR-04-01	15-04-0069-1-A	03/31/15 08:59	Solid	ICP 8300	04/06/15	04/09/15 12:37	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		42.1		0.503		1.01	
PAR-04-03	15-04-0069-2-A	03/31/15 09:03	Solid	ICP 8300	04/06/15	04/09/15 12:38	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		34.2		0.481		0.962	
PAR-04-06	15-04-0069-3-A	03/31/15 09:08	Solid	ICP 8300	04/06/15	04/09/15 12:40	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		38.1		0.478		0.957	
PAR-04-12	15-04-0069-4-A	03/31/15 09:13	Solid	ICP 8300	04/06/15	04/09/15 12:41	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		25.3		0.505		1.01	
PAR-04-18	15-04-0069-5-A	03/31/15 09:19	Solid	ICP 8300	04/06/15	04/09/15 12:42	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		46.5		0.495		0.990	
Method Blank	097-01-002-20748	N/A	Solid	ICP 8300	04/06/15	04/07/15 14:27	150406L03
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Lead		ND		0.476		0.952	

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



Calscience

Quality Control - Spike/Spike Duplicate

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

Date Received: 04/01/15
Work Order: 15-04-0069
Preparation: EPA 3050B
Method: EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-04-0214-15	Sample	Solid	ICP 8300	04/06/15	04/07/15 16:17	150406S03
15-04-0214-15	Matrix Spike	Solid	ICP 8300	04/06/15	04/07/15 16:23	150406S03
15-04-0214-15	Matrix Spike Duplicate	Solid	ICP 8300	04/06/15	04/07/15 16:24	150406S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	9.725	25.00	37.05	109	33.85	97	75-125	9	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS

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

Date Received: 04/01/15
 Work Order: 15-04-0069
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: Exide Vernon Offsite / 2013-3007-09

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-20748	LCS	Solid	ICP 8300	04/06/15	04/07/15 14:29	150406L03
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Lead		25.00	27.39	110	80-120	

Sample Analysis Summary Report

Work Order: 15-04-0069

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	771	ICP 8300	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Glossary of Terms and Qualifiers

Work Order: 15-04-0069

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<u>Qualifiers</u>	<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/PDS 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.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
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.

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.

ADVANCED GEOSERVICES CORP.
 CHAIN OF CUSTODY

Project Name: Exide Vernon Offsite

Project # 2013-3007-09

AGC Contact: Adam Doubleday

Shipment # 262

Lab Name/Location: Calscience, Garden Grove, CA

Shipment Tracking # courier pick-up

15-04-0069

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

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

Lab Use Only	Sample ID	Date	Time	Sample Type (C or G)	Matrix	Field Filtered	# of Containers	ANALYSIS				Preservatives	REMARKS
								LEAD 6010	#60 SEIVE				
1	PAR-04-01	3/31/2015	8:59	C	S	N	1	X					
2	PAR-04-03	3/31/2015	9:03	C	S	N	1	X					
3	PAR-04-06	3/31/2015	9:08	C	S	N	1	X					
4	PAR-04-12	3/31/2015	9:13	C	S	N	1	X					
5	PAR-04-18	3/31/2015	9:19	C	S	N	1	X					

Relinquished By: Emily Allen Received By: [Signature] Date/Time: 04/01/15 1130
 Relinquished By: [Signature] Received By: [Signature] Date/Time: 04/01/15 1405
 Relinquished By: _____ Received By: _____ Date/Time: _____

Preservative: 1-ice, 2- H₂SO₄, 3-HCl, 4-HNO₃, 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_OilSite Soil Sampling/AP



Calscience

WORK ORDER NUMBER: 15-04-0069

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Advanced Geoservices Corp.

DATE: 04 / 01 / 2015

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)
Thermometer ID: SC2 (CF: -0.3°C) Temperature (w/o CF): 3.5 °C (w/ CF): 3.2 °C
Checked by: [Signature]

CUSTODY SEAL:
Cooler Present and Intact Not Intact Not Present N/A
Sample(s) Present and Intact Not Intact Not Present N/A
Checked by: [Signatures]

Table with columns: Yes, No, N/A. Rows include Chain-of-Custody (COC) document(s) received with samples, COC document(s) received complete, Sampler's name indicated on COC, etc.

CONTAINER TYPE: (Trip Blank Lot Number: ECI)
Aqueous: VOA, VOA h, VOAna2, 100PJ, 100PJna2, 125AGB, 125AGBh, 125AGBp, 125PB, 125PBz nna, 250AGB, 250CGB, 250CGBs, 250PB, 250PBn, 500AGB, 500AGJ, 500AGJs, 500PB, 1AGB, 1AGBna2, 1AGBs, 1PB, 1PBna
Solid: 4ozCGJ, 8ozCGJ, 16ozCGJ, 16ozPJ, Sleeve, EnCores, TerraCores
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= Ziploc/Resealable Bag
Preservative: b=buffered f=filtered, h=HCl, n=HNO3, na=NaOH, na2=Na2S2O3, p=H3PO4, s=H2SO4, u=ultra-pure, znna=Zn(CH3CO2)2 + NaOH
Labeled/Checked by: [Signature]
Reviewed by: [Signature]