Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ID	Analyte identified by RT & presence of single mass ion

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
N	Presumptive evidence of material.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213374-1

Laboratory: TestAmerica Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-18 *
Arizona	State Program	9	AZ0671	10-14-18
California	LA Cty Sanitation Districts	9	10256	06-30-18 *
California	State Program	9	CA ELAP 2706	06-30-18 *
Guam	State Program	9	Cert. No. 17-003R	01-23-19
Hawaii	State Program	9	N/A	01-29-19
Kansas	NELAP	7	E-10420	07-31-18
Nevada	State Program	9	CA015312018-1	07-31-18
New Mexico	State Program	6	N/A	01-29-19
Oregon	NELAP	10	4028	01-29-19
USDA	Federal		P330-15-00184	07-08-18 *
Washington	State Program	10	C900	09-03-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record 211657

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Kyle Welchan	Site Contact: Sid Mills	Date: 6-12-18	COC No
Company Name: GLA / Republic	Tel/Fax: 858-451-1136	Lab Contact: Chiaghi	Carrier: TA	1 of 2 COCs
Address: 11445 W. Bernardo Ct	Analysis Turnaround Time			Sampler: AS, BS, MC
City/State/Zip: S.D., CA 92127	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 858-451-1136	TAT if different from Below			Walk-in Client:
Fax: 858-451-1083	☐ 2 weeks			Lab Sampling:
Project Name: Republic Services	☐ 1 week			Job / SDG No.:
Site: Sunshine Cyn Landfill	☐ 2 days			
PO# 4400 7851	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260B - VOCs *	310.1 - Total Alkalinity + Bicarbonate	300.0 - Ammonia	410.4 - COD	300.0 - Chloride, Bromide, Nitrate, Sulfate	6010B - Total Ca, Fe, Mg, Mn, K, Na	EPA 160.1 - TDS	EPA 150.1 - pH	EPA 340.2 - Fluoride	EPA 375.2 - Sulfate	SM 4500 - Cl - C	Carbon Dioxide	8270D 1,4-Dioxane	Sample Specific Notes
CM-9R3	6/12/18	1105	G	GW	13			X	X	X	X	X	X	X	X	X	X	X	X	X	
CM-10R		0935			13			X	X	X	X	X	X	X	X	X	X	X	X	X	
CM-11R		1250			13			X	X	X	X	X	X	X	X	X	X	X	X	X	
MW-5		1035			13			X	X	X	X	X	X	X	X	X	X	X	X	X	
Subdrain (N)		1130		WW	13			X	X	X	X	X	X	X	X	X	X	X	X	X	
Combined Subdrains		1218		WW	13			X	X	X	X	X	X	X	X	X	X	X	X	X	
Duplicate		—		GW	13			X	X	X	X	X	X	X	X	X	X	X	X	X	
MW-13R		1320			13			X	X	X	X	X	X	X	X	X	X	X	X	X	
PZ-2		1146			13			X	X	X	X	X	X	X	X	X	X	X	X	X	
MW-6		1035			13			X	X	X	X	X	X	X	X	X	X	X	X	X	
MW-14	↓	0914	↓	↓	13			X	X	X	X	X	X	X	X	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: * EPA Method 8260 includes all 40 CFR Part 258 Appendix I VOCs Dichlorodifluoromethane, MTBE, and 1,4-Dioxane -

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp (°C). Obs'd:	Corr'd:	Therm ID No.:
Relinquished by:	Company: Geo-Logic	Date/Time: 6/12/18 1410	Received by:	Company: TA	Date/Time: 6-12-18 1410
Relinquished by	Company: TA	Date/Time: 6-12-18 1650	Received by:	Company	Date/Time:
Relinquished by:	Company	Date/Time	Received in Laboratory by:	Company: TA IRV	Date/Time: 6/12/18 1650

IR-5C6 1.9/1.9 1.3/1.3 1.6/1.6 1.9/1.9

VGS 6/18

440-213374 Chain of Custody

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6/26/2018

Chain of Custody Record 210798

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Kyle Goldman	Site Contact: Josh Mills	Date: 6-12-18	COC No:
Company Name: GLA / Republic	Tel/Fax: 858-451-1136	Lab Contact: Unashi	Carrier: T/A	2 of 2 COCs
Address: 11455 W. Bernardo Ct.	Analysis Turnaround Time			Sampler: AS, RS, MC
City/State/Zip: San Diego CA 92127	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 858-451-1136	TAT if different from Below _____			Walk-in Client:
Fax: 858-451-1083	☐ 2 weeks			Lab Sampling:
Project Name: Republic Services	☐ 1 week			
Site: Sunshine Cyn Landfill	☐ 2 days			Job / SDG No
P O #: 4400-7851	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 8260B-VOCs*	Sample Specific Notes
QCAR	6/12/18	-	G	Lab D.I	4			X	
QCTB	↓	-	↓	↓	2			X	

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: *EPA 8260 includes all 40 CFR part 258 Appendix I VOCs. Dichlorodifluoromethane, MTBE, and 1,4-Dioxane.

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No : | Cooler Temp (°C) Obs'd: _____ Corr'd: _____ Therm ID No.: _____

	Company	Date/Time	Received by	Company	Date/Time
Relinquished by:	Geotogz	6/12/18 1410		TA	6-12-18 1410
Relinquished by:	TA	6-12-18 1650			
Relinquished by:	Company	Date/Time	Received in Laboratory by	Company	Date/Time
				TA IRV	6/12/18 1650

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6/26/2018

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 440-213374-1

Login Number: 213374

List Source: TestAmerica Irvine

List Number: 1

Creator: Soderblom, Tim

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-213518-1
Client Project/Site: Republic Sunshine Canyon

For:
Geo-Logic Associates
11415 West Bernardo Court
Suite 200
San Diego, California 92127

Attn: Kyle Welchans

Authorized for release by:
6/27/2018 5:47:19 PM

Rossina Tomova, Project Manager I
(949)261-1022
rossina.tomova@testamericainc.com

Table of Contents

Sample Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-213518-1	DW-1	Water	06/13/18 10:15	06/13/18 17:13
440-213518-2	DW-2	Water	06/13/18 11:54	06/13/18 17:13
440-213518-3	DW-3	Water	06/13/18 13:15	06/13/18 17:13
440-213518-4	DW-5	Water	06/13/18 09:38	06/13/18 17:13
440-213518-5	MW-1	Water	06/13/18 10:25	06/13/18 17:13
440-213518-6	MW-9	Water	06/13/18 08:15	06/13/18 17:13
440-213518-7	Extraction Trench	Water	06/13/18 11:20	06/13/18 17:13
440-213518-8	QCAB	Water	06/13/18 00:01	06/13/18 17:13
440-213518-9	QCTB	Water	06/13/18 00:01	06/13/18 17:13

Job ID: 440-213518-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-213518-1

Comments
No additional comments.

Receipt
The samples were received on 6/13/2018 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.5º C, 0.8º C and 1.3º C.

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

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

HPLC/IC
Method(s) 300.0: The following samples were diluted for Bromide or Fluoride due to the nature of the sample matrix: DW-1 (440-213518-1), MW-9 (440-213518-6) and Extraction Trench (440-213518-7). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted for Nitrate as N due to the nature of the sample matrix: DW-1 (440-213518-1), MW-1 (440-213518-5), MW-9 (440-213518-6) and Extraction Trench (440-213518-7). Elevated reporting limits (RLs) are provided.

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

Metals
Method(s) 6010B: The serial dilution performed for the following sample associated with batch 440-483904 was outside control limits for Boron and Magnesium: (440-213518-K-1-A SD)

Method(s) 6010B: The method blank for preparation batch 440-483392 and analytical batch 440-483904 contained Calcium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 440-483392 and analytical batch 440-483901 contained Sodium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

General Chemistry
Method(s) SM 5310C: The continuing calibration blank (CCB) for analytical batch 440-482280 contained Total Organic Carbon above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

Organic Prep
Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-482875. 3520C_1625/8270-NDMA/SIM 1,4 Dioxane/1,4 Dioxane.

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

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

Client Sample ID: DW-1
Date Collected: 06/13/18 10:15
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 10:33	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Acrolein	ND		50	2.5	ug/L			06/16/18 16:04	1
Acrylonitrile	ND		50	1.0	ug/L			06/16/18 16:04	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 10:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 10:33	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 10:33	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 10:33	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 10:33	1
Acetone	ND		20	10	ug/L			06/22/18 10:33	1
Acetonitrile	ND		20	10	ug/L			06/22/18 10:33	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 10:33	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 10:33	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 10:33	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 10:33	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 10:33	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 10:33	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 10:33	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 10:33	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 10:33	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 10:33	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 10:33	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 10:33	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 10:33	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-1
Date Collected: 06/13/18 10:15
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 10:33	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 10:33	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Propionitrile	ND		20	10	ug/L			06/22/18 10:33	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 10:33	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 10:33	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 10:33	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 10:33	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 10:33	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 10:33	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 10:33	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 10:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 10:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.6*	*T J*	*ug/L*		*3.05*			*06/22/18 10:33*	*1*
Unknown	*22*	*T J*	*ug/L*		*17.64*			*06/22/18 10:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*116*		*80 - 128*		*06/16/18 16:04*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/16/18 16:04*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 10:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 10:33*	*1*
Dibromofluoromethane (Surr)	*114*		*76 - 132*		*06/16/18 16:04*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*06/22/18 10:33*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.99	0.25	ug/L		06/19/18 09:09	06/21/18 09:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*	*06/19/18 09:09*	*06/21/18 09:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		1.0	0.50	mg/L			06/14/18 01:17	2
Nitrate as N	ND		0.22	0.11	mg/L			06/14/18 01:17	2
Chloride	**14**		1.0	0.50	mg/L			06/14/18 01:17	2
Fluoride	**2.4**		1.0	0.50	mg/L			06/14/18 01:17	2
Sulfate	**1700**		50	25	mg/L			06/14/18 01:36	100

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**2.5**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:35	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-1

Lab Sample ID: 440-213518-1

Date Collected: 06/13/18 10:15

Matrix: Water

Date Received: 06/13/18 17:13

Method: 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:35	1
Magnesium	**1.5**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:35	1
Iron	ND		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:35	1
Sodium	**1100**	**B**	2.5	1.3	mg/L		06/21/18 09:43	06/23/18 13:15	5
Calcium	**2.8**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:35	1
Boron	**2.1**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**11**	**J**	20	10	mg/L			06/21/18 13:55	1
Total Dissolved Solids	**3200**		50	25	mg/L			06/20/18 14:57	1
Ammonia (as N)	**0.76**		0.50	0.10	mg/L		06/18/18 04:00	06/18/18 07:00	1
Total Sulfide	**0.19**		0.050	0.027	mg/L			06/19/18 12:39	1
Total Organic Carbon	**3.2**		0.10	0.050	mg/L			06/14/18 14:37	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**520**		4.0	4.0	mg/L			06/14/18 05:29	1
Bicarbonate Alkalinity as CaCO3	**420**		4.0	4.0	mg/L			06/14/18 05:29	1
Carbon Dioxide, Free	ND		2.0	2.0	mg/L			06/21/18 11:48	1

Client Sample ID: DW-2

Lab Sample ID: 440-213518-2

Date Collected: 06/13/18 11:54

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 12:19	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Acrolein	ND		50	2.5	ug/L			06/16/18 16:28	1
Acrylonitrile	ND		50	1.0	ug/L			06/16/18 16:28	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 12:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 12:19	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 12:19	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 12:19	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 12:19	1
Acetone	ND		20	10	ug/L			06/22/18 12:19	1
Acetonitrile	ND		20	10	ug/L			06/22/18 12:19	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 12:19	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 12:19	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-2
Date Collected: 06/13/18 11:54
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 12:19	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 12:19	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 12:19	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 12:19	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 12:19	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 12:19	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 12:19	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 12:19	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 12:19	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 12:19	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 12:19	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 12:19	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 12:19	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Propionitrile	ND		20	10	ug/L			06/22/18 12:19	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 12:19	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 12:19	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 12:19	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 12:19	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 12:19	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 12:19	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 12:19	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 12:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2.8*	*T J*	*ug/L*		*3.07*			*06/22/18 12:19*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 12:19*	*1*
Unknown	*13*	*T J*	*ug/L*		*16.52*			*06/22/18 12:19*	*1*

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-2
Date Collected: 06/13/18 11:54
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*115*		*80 - 128*		*06/16/18 16:28*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/16/18 16:28*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/22/18 12:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 12:19*	*1*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*06/16/18 16:28*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*06/22/18 12:19*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.98	0.24	ug/L		06/19/18 09:09	06/21/18 09:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	*76*		*30 - 120*	*06/19/18 09:09*	*06/21/18 09:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 01:55	1
Sulfate	**1100**		25	13	mg/L			06/14/18 02:50	50

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.29**	**J**	0.50	0.25	mg/L			06/14/18 01:55	1
Chloride	**11**		0.50	0.25	mg/L			06/14/18 01:55	1
Fluoride	**0.51**		0.50	0.25	mg/L			06/14/18 01:55	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**4.6**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:47	1
Manganese	**0.13**		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:47	1
Magnesium	**65**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:47	1
Iron	**1.3**		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:47	1
Sodium	**460**	**B**	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 13:28	1
Calcium	**98**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:47	1
Boron	**0.60**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:55	1
Total Dissolved Solids	**1900**		20	10	mg/L			06/20/18 14:57	1
Ammonia (as N)	**3.3**		0.50	0.10	mg/L		06/18/18 04:00	06/18/18 07:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:39	1
Total Organic Carbon	**1.6**		0.10	0.050	mg/L			06/14/18 14:48	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**350**		4.0	4.0	mg/L			06/14/18 05:50	1
Bicarbonate Alkalinity as CaCO3	**350**		4.0	4.0	mg/L			06/14/18 05:50	1
Carbon Dioxide, Free	**25**		2.0	2.0	mg/L			06/21/18 11:48	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-3
Date Collected: 06/13/18 13:15
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 12:45	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Acrolein	ND		50	2.5	ug/L			06/16/18 16:51	1
Acrylonitrile	ND		50	1.0	ug/L			06/16/18 16:51	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 12:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 12:45	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 12:45	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 12:45	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 12:45	1
Acetone	ND		20	10	ug/L			06/22/18 12:45	1
Acetonitrile	ND		20	10	ug/L			06/22/18 12:45	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 12:45	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 12:45	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 12:45	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 12:45	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 12:45	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 12:45	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 12:45	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 12:45	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 12:45	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 12:45	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 12:45	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 12:45	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 12:45	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-3
Date Collected: 06/13/18 13:15
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 12:45	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 12:45	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Propionitrile	ND		20	10	ug/L			06/22/18 12:45	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 12:45	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 12:45	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 12:45	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 12:45	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 12:45	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 12:45	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 12:45	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 12:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 12:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*T J*	*ug/L*		*7.26*			*06/22/18 12:45*	*1*
Unknown	*11*	*T J*	*ug/L*		*16.58*			*06/22/18 12:45*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*17.65*			*06/22/18 12:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*115*		*80 - 128*		*06/16/18 16:51*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/16/18 16:51*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*06/22/18 12:45*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*06/22/18 12:45*	*1*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*06/16/18 16:51*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/22/18 12:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.99	0.25	ug/L		06/19/18 09:09	06/21/18 10:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*66*		*30 - 120*	*06/19/18 09:09*	*06/21/18 10:02*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			06/14/18 03:46	1
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 03:46	1
Chloride	**15**		0.50	0.25	mg/L			06/14/18 03:46	1
Fluoride	**0.37**	**J**	0.50	0.25	mg/L			06/14/18 03:46	1
Sulfate	**1200**		25	13	mg/L			06/14/18 04:05	50

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-3

Lab Sample ID: 440-213518-3

Date Collected: 06/13/18 13:15

Matrix: Water

Date Received: 06/13/18 17:13

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**9.2**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:50	1
Manganese	**0.46**		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:50	1
Magnesium	**100**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:50	1
Iron	**0.62**		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:50	1
Sodium	**72**	**B**	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 13:30	1
Calcium	**290**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:50	1
Boron	**0.061**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:55	1
Total Dissolved Solids	**1900**		20	10	mg/L			06/20/18 14:57	1
Ammonia (as N)	**2.4**		0.50	0.10	mg/L		06/18/18 04:00	06/18/18 07:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:39	1
Total Organic Carbon	**0.34**		0.10	0.050	mg/L			06/15/18 08:02	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**150**		4.0	4.0	mg/L			06/14/18 05:57	1
Bicarbonate Alkalinity as CaCO3	**150**		4.0	4.0	mg/L			06/14/18 05:57	1
Carbon Dioxide, Free	**18**		2.0	2.0	mg/L			06/21/18 11:48	1

Client Sample ID: DW-5

Lab Sample ID: 440-213518-4

Date Collected: 06/13/18 09:38

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 13:12	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Acrolein	ND		50	2.5	ug/L			06/19/18 18:45	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 18:45	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 13:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 13:12	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 13:12	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 13:12	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 13:12	1
Acetone	ND		20	10	ug/L			06/22/18 13:12	1
Acetonitrile	ND		20	10	ug/L			06/22/18 13:12	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 13:12	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-5
Date Collected: 06/13/18 09:38
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 13:12	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 13:12	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 13:12	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 13:12	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 13:12	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 13:12	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 13:12	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 13:12	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 13:12	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 13:12	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 13:12	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 13:12	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 13:12	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 13:12	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Propionitrile	ND		20	10	ug/L			06/22/18 13:12	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 13:12	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 13:12	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 13:12	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 13:12	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 13:12	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 13:12	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 13:12	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 13:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 13:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Butane, 2,3-dimethyl-	*13*	*T J N*	*ug/L*		*5.85*	*79-29-8*		*06/22/18 13:12*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.26*			*06/22/18 13:12*	*1*
Benzene, (2-methylpropyl)-	*12*	*T J N*	*ug/L*		*13.01*	*538-93-2*		*06/22/18 13:12*	*1*

Client Sample ID: DW-5

Date Collected: 06/13/18 09:38
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-4

Matrix: Water

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

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1H-Indene,2,3-dihydro-2,2-dimethyl-	*8.9*	*T J N*	*ug/L*		*14.09*	*20836-11-7*		*06/22/18 13:12*	*1*
1H-Indene, 2,3-dihydro-1,1-dimethyl-	*8.9*	*T J N*	*ug/L*		*14.16*	*4912-92-9*		*06/22/18 13:12*	*1*
Benzene, 1,2,3,4-tetramethyl-	*31*	*T J N*	*ug/L*		*14.32*	*488-23-3*		*06/22/18 13:12*	*1*
Unknown	*16*	*T J*	*ug/L*		*15.07*			*06/22/18 13:12*	*1*
Benzene, 1,3-dimethyl-5-(1-methylethyl)-	*11*	*T J N*	*ug/L*		*15.53*	*4706-90-5*		*06/22/18 13:12*	*1*
1H-Indene, 2,3-dihydro-4,7-dimethyl-	*11*	*T J N*	*ug/L*		*15.93*	*6682-71-9*		*06/22/18 13:12*	*1*
Unknown	*8.7*	*T J*	*ug/L*		*16.16*			*06/22/18 13:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/19/18 18:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*06/19/18 18:45*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 13:12*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 13:12*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*06/19/18 18:45*	*1*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*06/22/18 13:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.99	0.25	ug/L		06/19/18 09:09	06/21/18 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*70*		*30 - 120*	*06/19/18 09:09*	*06/21/18 10:26*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			06/14/18 04:23	1
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 04:23	1
Chloride	**19**		0.50	0.25	mg/L			06/14/18 04:23	1
Fluoride	**3.5**		0.50	0.25	mg/L			06/14/18 04:23	1
Sulfate	ND		0.50	0.25	mg/L			06/14/18 04:23	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1.4**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:52	1
Manganese	**0.093**		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:52	1
Magnesium	**0.88**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:52	1
Iron	**0.12**		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:52	1
Sodium	**460**	**B**	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 13:32	1
Calcium	**5.4**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:52	1
Boron	**2.7**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**20**		20	10	mg/L			06/21/18 13:56	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			06/20/18 14:57	1
Ammonia (as N)	**0.44**	**J**	0.50	0.10	mg/L		06/26/18 04:00	06/26/18 06:00	1
Total Sulfide	**0.058**		0.050	0.027	mg/L			06/19/18 12:39	1
Total Organic Carbon	**7.3**		0.10	0.050	mg/L			06/14/18 15:16	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: DW-5

Lab Sample ID: 440-213518-4

Date Collected: 06/13/18 09:38

Matrix: Water

Date Received: 06/13/18 17:13

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	940		4.0	4.0	mg/L			06/14/18 06:14	1
Bicarbonate Alkalinity as CaCO3	910		4.0	4.0	mg/L			06/14/18 06:14	1
Carbon Dioxide, Free	7.0		2.0	2.0	mg/L			06/21/18 11:48	1

Client Sample ID: MW-1

Lab Sample ID: 440-213518-5

Date Collected: 06/13/18 10:25

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 13:38	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Acrolein	ND		50	2.5	ug/L			06/19/18 20:08	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 20:08	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 13:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 13:38	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 13:38	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 13:38	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 13:38	1
Acetone	ND		20	10	ug/L			06/22/18 13:38	1
Acetonitrile	ND		20	10	ug/L			06/22/18 13:38	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 13:38	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 13:38	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 13:38	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 13:38	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 13:38	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 13:38	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1

Client Sample ID: MW-1
Date Collected: 06/13/18 10:25
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 13:38	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 13:38	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 13:38	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 13:38	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 13:38	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 13:38	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 13:38	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 13:38	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 13:38	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Propionitrile	ND		20	10	ug/L			06/22/18 13:38	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 13:38	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 13:38	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 13:38	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 13:38	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 13:38	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 13:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 13:38	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 13:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*T J*	*ug/L*		*7.26*			*06/22/18 13:38*	*1*
Unknown	*6.1*	*T J*	*ug/L*		*17.32*			*06/22/18 13:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 128*		*06/19/18 20:08*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/19/18 20:08*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 13:38*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 13:38*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/19/18 20:08*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*06/22/18 13:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**11**		0.98	0.25	ug/L		06/19/18 09:09	06/21/18 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*53*		*30 - 120*	*06/19/18 09:09*	*06/21/18 10:49*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**2.3**		1.0	0.50	mg/L			06/14/18 05:01	2

Client Sample ID: MW-1

Lab Sample ID: 440-213518-5

Date Collected: 06/13/18 10:25

Matrix: Water

Date Received: 06/13/18 17:13

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.22	0.11	mg/L			06/14/18 05:01	2
Chloride	**170**		50	25	mg/L			06/14/18 05:19	100
Fluoride	**1.8**		1.0	0.50	mg/L			06/14/18 05:01	2
Sulfate	**1400**		50	25	mg/L			06/14/18 05:19	100

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**25**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:55	1
Manganese	**2.4**		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:55	1
Magnesium	**150**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:55	1
Iron	**44**		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:55	1
Sodium	**320**	**B**	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 13:35	1
Calcium	**330**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:55	1
Boron	**1.2**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**81**		20	10	mg/L			06/21/18 13:56	1
Total Dissolved Solids	**3000**		20	10	mg/L			06/20/18 14:57	1
Ammonia (as N)	**3.7**		0.50	0.10	mg/L		06/26/18 04:00	06/26/18 06:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	**13**		0.10	0.050	mg/L			06/14/18 15:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**600**		4.0	4.0	mg/L			06/14/18 06:27	1
Bicarbonate Alkalinity as CaCO3	**600**		4.0	4.0	mg/L			06/14/18 06:27	1
Carbon Dioxide, Free	**120**		2.0	2.0	mg/L			06/21/18 11:48	1

Client Sample ID: MW-9

Lab Sample ID: 440-213518-6

Date Collected: 06/13/18 08:15

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 14:05	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Acrolein	ND		50	2.5	ug/L			06/19/18 20:35	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 20:35	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 14:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 14:05	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 14:05	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: MW-9
Date Collected: 06/13/18 08:15
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	**0.26**	**J**	0.50	0.25	ug/L			06/22/18 14:05	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 14:05	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 14:05	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 14:05	1
Acetone	ND		20	10	ug/L			06/22/18 14:05	1
Acetonitrile	ND		20	10	ug/L			06/22/18 14:05	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 14:05	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 14:05	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 14:05	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 14:05	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 14:05	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 14:05	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
cis-1,2-Dichloroethene	**0.96**		0.50	0.25	ug/L			06/22/18 14:05	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 14:05	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 14:05	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 14:05	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 14:05	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 14:05	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 14:05	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 14:05	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 14:05	1
Methyl tert-butyl ether	**1.0**		0.50	0.25	ug/L			06/22/18 14:05	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 14:05	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Propionitrile	ND		20	10	ug/L			06/22/18 14:05	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
t-Butanol	**47**		10	5.0	ug/L			06/22/18 14:05	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Tetrahydrofuran	**12**		10	5.0	ug/L			06/22/18 14:05	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 14:05	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 14:05	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 14:05	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 14:05	1

Client Sample ID: MW-9
Date Collected: 06/13/18 08:15
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 14:05	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 14:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Silanol, trimethyl-	*11*	*T J N*	*ug/L*		*5.78*	*1066-40-6*		*06/22/18 14:05*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 14:05*	*1*
Unknown	*16*	*T J*	*ug/L*		*16.44*			*06/22/18 14:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/19/18 20:35*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*06/19/18 20:35*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*06/22/18 14:05*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*06/22/18 14:05*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*06/19/18 20:35*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*06/22/18 14:05*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**32**		1.0	0.26	ug/L		06/19/18 09:09	06/21/18 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*54*		*30 - 120*	*06/19/18 09:09*	*06/21/18 11:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**5.2**		2.5	1.3	mg/L			06/14/18 05:38	5
Nitrate as N	**0.30**	**J**	0.55	0.28	mg/L			06/14/18 05:38	5
Chloride	**300**		100	50	mg/L			06/14/18 05:56	200
Fluoride	**1.8**	**J**	2.5	1.3	mg/L			06/14/18 05:38	5
Sulfate	**1500**		100	50	mg/L			06/14/18 05:56	200

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**33**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:57	1
Manganese	**3.6**		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:57	1
Magnesium	**210**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:57	1
Iron	**67**		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:57	1
Sodium	**510**	**B**	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 13:37	1
Calcium	**430**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:57	1
Boron	**2.2**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**220**		20	10	mg/L			06/21/18 13:56	1
Total Dissolved Solids	**3900**		50	25	mg/L			06/20/18 14:57	1
Ammonia (as N)	**16**		2.5	0.50	mg/L		06/26/18 04:00	06/26/18 06:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	**14**		0.10	0.050	mg/L			06/14/18 16:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**1000**		4.0	4.0	mg/L			06/14/18 06:44	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: MW-9

Lab Sample ID: 440-213518-6

Date Collected: 06/13/18 08:15

Matrix: Water

Date Received: 06/13/18 17:13

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	1000		4.0	4.0	mg/L			06/14/18 06:44	1
Carbon Dioxide, Free	150		2.0	2.0	mg/L			06/21/18 11:48	1

Client Sample ID: Extraction Trench

Lab Sample ID: 440-213518-7

Date Collected: 06/13/18 11:20

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 14:31	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Acrolein	ND		50	2.5	ug/L			06/19/18 21:03	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 21:03	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 14:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 14:31	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,4-Dichlorobenzene	1.5		0.50	0.25	ug/L			06/22/18 14:31	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 14:31	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 14:31	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 14:31	1
Acetone	ND		20	10	ug/L			06/22/18 14:31	1
Acetonitrile	ND		20	10	ug/L			06/22/18 14:31	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 14:31	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 14:31	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 14:31	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 14:31	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 14:31	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 14:31	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
cis-1,2-Dichloroethene	1.4		0.50	0.25	ug/L			06/22/18 14:31	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: Extraction Trench
Date Collected: 06/13/18 11:20
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 14:31	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 14:31	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 14:31	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 14:31	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 14:31	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 14:31	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 14:31	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 14:31	1
Methyl tert-butyl ether	**1.5**		0.50	0.25	ug/L			06/22/18 14:31	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 14:31	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Propionitrile	ND		20	10	ug/L			06/22/18 14:31	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
t-Butanol	**45**		10	5.0	ug/L			06/22/18 14:31	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Tetrahydrofuran	**9.1**	**J**	10	5.0	ug/L			06/22/18 14:31	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 14:31	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 14:31	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 14:31	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 14:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 14:31	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 14:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 14:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4.3*	*T J*	*ug/L*		*3.31*			*06/22/18 14:31*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*3.58*			*06/22/18 14:31*	*1*
Unknown	*10*	*T J*	*ug/L*		*5.78*			*06/22/18 14:31*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.26*			*06/22/18 14:31*	*1*
Unknown	*3.5*	*T J*	*ug/L*		*15.76*			*06/22/18 14:31*	*1*
Unknown	*4.7*	*T J*	*ug/L*		*17.07*			*06/22/18 14:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 128*		*06/19/18 21:03*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/19/18 21:03*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 14:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 14:31*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*06/19/18 21:03*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*06/22/18 14:31*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**25**		0.99	0.25	ug/L		06/19/18 09:09	06/21/18 11:35	1

Client Sample ID: Extraction Trench

Lab Sample ID: 440-213518-7

Date Collected: 06/13/18 11:20

Matrix: Water

Date Received: 06/13/18 17:13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*66*		*30 - 120*	*06/19/18 09:09*	*06/21/18 11:35*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**5.7**		2.5	1.3	mg/L			06/14/18 06:15	5
Nitrate as N	**0.39**	**J**	0.55	0.28	mg/L			06/14/18 06:15	5
Chloride	**350**		100	50	mg/L			06/14/18 06:34	200
Fluoride	**1.7**	**J**	2.5	1.3	mg/L			06/14/18 06:15	5
Sulfate	**1400**		100	50	mg/L			06/14/18 06:34	200

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**33**		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 12:23	1
Manganese	**4.2**		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 12:23	1
Magnesium	**190**		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 12:23	1
Iron	**56**		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 12:23	1
Sodium	**430**	**B**	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 14:06	1
Calcium	**390**	**B**	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 12:23	1
Boron	**1.7**		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**190**		20	10	mg/L			06/21/18 13:56	1
Total Dissolved Solids	**3900**		50	25	mg/L			06/20/18 14:57	1
Ammonia (as N)	**12**		2.5	0.50	mg/L		06/26/18 04:00	06/26/18 06:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	**13**		0.10	0.050	mg/L			06/14/18 16:31	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**1000**		4.0	4.0	mg/L			06/14/18 07:02	1
Bicarbonate Alkalinity as CaCO3	**1000**		4.0	4.0	mg/L			06/14/18 07:02	1
Carbon Dioxide, Free	**160**		2.0	2.0	mg/L			06/21/18 12:04	1

Client Sample ID: QCAB

Lab Sample ID: 440-213518-8

Date Collected: 06/13/18 00:01

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 14:57	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Acrolein	ND		50	2.5	ug/L			06/19/18 21:30	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 21:30	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 14:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 14:57	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:57	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: QCAB
Date Collected: 06/13/18 00:01
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 14:57	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 14:57	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 14:57	1
Acetone	ND		20	10	ug/L			06/22/18 14:57	1
Acetonitrile	ND		20	10	ug/L			06/22/18 14:57	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 14:57	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 14:57	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 14:57	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 14:57	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 14:57	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 14:57	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 14:57	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 14:57	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 14:57	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 14:57	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 14:57	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 14:57	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 14:57	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 14:57	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 14:57	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Propionitrile	ND		20	10	ug/L			06/22/18 14:57	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 14:57	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 14:57	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 14:57	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: QCAB

Lab Sample ID: 440-213518-8

Date Collected: 06/13/18 00:01

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 14:57	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 14:57	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 14:57	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 14:57	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 14:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 14:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2.8*	*T J*	*ug/L*		*3.30*			*06/22/18 14:57*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 14:57*	*1*
Unknown	*21*	*T J*	*ug/L*		*17.55*			*06/22/18 14:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/19/18 21:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/19/18 21:30*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*06/22/18 14:57*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/22/18 14:57*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/19/18 21:30*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*06/22/18 14:57*	*1*

Client Sample ID: QCTB

Lab Sample ID: 440-213518-9

Date Collected: 06/13/18 00:01

Matrix: Water

Date Received: 06/13/18 17:13

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 15:23	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Acrolein	ND		50	2.5	ug/L			06/19/18 21:58	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 21:58	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 15:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 15:23	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 15:23	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 15:23	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 15:23	1
Acetone	ND		20	10	ug/L			06/22/18 15:23	1
Acetonitrile	ND		20	10	ug/L			06/22/18 15:23	1

Client Sample ID: QCTB
Date Collected: 06/13/18 00:01
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		5.0	2.5	ug/L			06/22/18 15:23	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 15:23	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 15:23	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 15:23	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 15:23	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 15:23	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 15:23	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 15:23	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 15:23	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 15:23	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 15:23	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 15:23	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 15:23	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 15:23	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 15:23	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Propionitrile	ND		20	10	ug/L			06/22/18 15:23	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 15:23	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 15:23	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 15:23	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 15:23	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 15:23	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 15:23	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 15:23	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 15:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4.4*	*T J*	*ug/L*		*3.31*			*06/22/18 15:23*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.26*			*06/22/18 15:23*	*1*

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: QCTB
Date Collected: 06/13/18 00:01
Date Received: 06/13/18 17:13

Lab Sample ID: 440-213518-9
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	21	T J	ug/L		16.21			06/22/18 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		80 - 128		06/19/18 21:58	1
4-Bromofluorobenzene (Surr)	95		80 - 120		06/19/18 21:58	1
Toluene-d8 (Surr)	105		80 - 128		06/22/18 15:23	1
4-Bromofluorobenzene (Surr)	96		80 - 120		06/22/18 15:23	1
Dibromofluoromethane (Surr)	97		76 - 132		06/19/18 21:58	1
Dibromofluoromethane (Surr)	104		76 - 132		06/22/18 15:23	1

Method Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
410.4	COD	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CO2 C	Free Carbon Dioxide	SM	TAL IRV
SM 4500 NH3 D	Ammonia	SM	TAL IRV
SM 4500 S2 D	Sulfide, Total	SM	TAL IRV
SM 5310C	TOC	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL IRV
SM 4500 NH3 B	Distillation, Ammonia	SM	TAL IRV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

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

Client Sample ID: DW-1

Lab Sample ID: 440-213518-1

Date Collected: 06/13/18 10:15

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 10:33	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482498	06/16/18 16:04	WK	TAL IRV
Total/NA	Prep	3520C			1015 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 09:17	ANW	TAL IRV
Total/NA	Analysis	300.0		2			481846	06/14/18 01:17	NN	TAL IRV
Total/NA	Analysis	300.0		2			481847	06/14/18 01:17	NN	TAL IRV
Total/NA	Analysis	300.0		100			481847	06/14/18 01:36	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		5			483901	06/23/18 13:15	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 11:35	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:55	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 05:29	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 11:48	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	482564	06/18/18 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			482583	06/18/18 07:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:39	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482280	06/14/18 14:37	YZ	TAL IRV

Client Sample ID: DW-2

Lab Sample ID: 440-213518-2

Date Collected: 06/13/18 11:54

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 12:19	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482498	06/16/18 16:28	WK	TAL IRV
Total/NA	Prep	3520C			1025 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 09:40	ANW	TAL IRV
Total/NA	Analysis	300.0		1			481846	06/14/18 01:55	NN	TAL IRV
Total/NA	Analysis	300.0	DL	1			481847	06/14/18 01:55	NN	TAL IRV
Total/NA	Analysis	300.0		50			481847	06/14/18 02:50	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483901	06/23/18 13:28	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 11:47	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:55	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 05:50	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 11:48	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	482564	06/18/18 04:00	YZ	TAL IRV

Client Sample ID: DW-2

Lab Sample ID: 440-213518-2

Date Collected: 06/13/18 11:54

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 NH3 D		1			482583	06/18/18 07:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:39	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482280	06/14/18 14:48	YZ	TAL IRV

Client Sample ID: DW-3

Lab Sample ID: 440-213518-3

Date Collected: 06/13/18 13:15

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 12:45	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482498	06/16/18 16:51	WK	TAL IRV
Total/NA	Prep	3520C			1010 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 10:02	ANW	TAL IRV
Total/NA	Analysis	300.0		1			481846	06/14/18 03:46	NN	TAL IRV
Total/NA	Analysis	300.0		1			481847	06/14/18 03:46	NN	TAL IRV
Total/NA	Analysis	300.0		50			481847	06/14/18 04:05	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483901	06/23/18 13:30	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 11:50	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:55	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 05:57	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 11:48	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	482564	06/18/18 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			482583	06/18/18 07:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:39	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482361	06/15/18 08:02	YZ	TAL IRV

Client Sample ID: DW-5

Lab Sample ID: 440-213518-4

Date Collected: 06/13/18 09:38

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 13:12	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 18:45	WK	TAL IRV
Total/NA	Prep	3520C			1010 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 10:26	ANW	TAL IRV
Total/NA	Analysis	300.0		1			481846	06/14/18 04:23	NN	TAL IRV
Total/NA	Analysis	300.0		1			481847	06/14/18 04:23	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV

Client Sample ID: DW-5

Lab Sample ID: 440-213518-4

Date Collected: 06/13/18 09:38

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6010B		1			483901	06/23/18 13:32	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 11:52	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:56	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 06:14	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 11:48	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	484187	06/26/18 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			484212	06/26/18 06:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:39	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482280	06/14/18 15:16	YZ	TAL IRV

Client Sample ID: MW-1

Lab Sample ID: 440-213518-5

Date Collected: 06/13/18 10:25

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 13:38	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 20:08	WK	TAL IRV
Total/NA	Prep	3520C			1020 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 10:49	ANW	TAL IRV
Total/NA	Analysis	300.0		2			481846	06/14/18 05:01	NN	TAL IRV
Total/NA	Analysis	300.0		2			481847	06/14/18 05:01	NN	TAL IRV
Total/NA	Analysis	300.0		100			481847	06/14/18 05:19	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483901	06/23/18 13:35	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 11:55	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:56	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 06:27	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 11:48	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	484187	06/26/18 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			484212	06/26/18 06:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482280	06/14/18 15:58	YZ	TAL IRV

Client Sample ID: MW-9

Lab Sample ID: 440-213518-6

Date Collected: 06/13/18 08:15

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 14:05	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 20:35	WK	TAL IRV
Total/NA	Prep	3520C			975 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 11:12	ANW	TAL IRV
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	481846	06/14/18 05:38	NN	TAL IRV
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	481847	06/14/18 05:38	NN	TAL IRV
Total/NA	Analysis	300.0		200			481847	06/14/18 05:56	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483901	06/23/18 13:37	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 11:57	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:56	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 06:44	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 11:48	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			10 mL	50 mL	484187	06/26/18 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			484212	06/26/18 06:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482280	06/14/18 16:15	YZ	TAL IRV

Client Sample ID: Extraction Trench

Lab Sample ID: 440-213518-7

Date Collected: 06/13/18 11:20

Matrix: Water

Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 14:31	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 21:03	WK	TAL IRV
Total/NA	Prep	3520C			1015 mL	1.0 mL	482875	06/19/18 09:09	JS1	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 11:35	ANW	TAL IRV
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	481846	06/14/18 06:15	NN	TAL IRV
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	481847	06/14/18 06:15	NN	TAL IRV
Total/NA	Analysis	300.0		200			481847	06/14/18 06:34	NN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483901	06/23/18 14:06	P1R	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483392	06/21/18 09:43	MN1	TAL IRV
Total Recoverable	Analysis	6010B		1			483904	06/23/18 12:23	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:56	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482100	06/14/18 07:02	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	483125	06/20/18 14:57	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483440	06/21/18 12:04	KYP	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			10 mL	50 mL	484187	06/26/18 04:00	YZ	TAL IRV

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Client Sample ID: Extraction Trench

Lab Sample ID: 440-213518-7

Date Collected: 06/13/18 11:20
Matrix: Water
Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 NH3 D		1			484212	06/26/18 06:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482280	06/14/18 16:31	YZ	TAL IRV

Client Sample ID: QCAB

Lab Sample ID: 440-213518-8

Date Collected: 06/13/18 00:01
Matrix: Water
Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 14:57	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 21:30	WK	TAL IRV

Client Sample ID: QCTB

Lab Sample ID: 440-213518-9

Date Collected: 06/13/18 00:01
Matrix: Water
Date Received: 06/13/18 17:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 15:23	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 21:58	WK	TAL IRV

Laboratory References:

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

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

Lab Sample ID: MB 440-482498/4
Matrix: Water
Analysis Batch: 482498

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		50	2.5	ug/L			06/16/18 09:09	1
Acrylonitrile	ND		50	1.0	ug/L			06/16/18 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*113*		*80 - 128*		*06/16/18 09:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/16/18 09:09*	*1*
Dibromofluoromethane (Surr)	*114*		*76 - 132*		*06/16/18 09:09*	*1*

Lab Sample ID: LCS 440-482498/5
Matrix: Water
Analysis Batch: 482498

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acrolein			25.0	19.3	J	ug/L		77	10 - 145		
Acrylonitrile			250	263		ug/L		105	48 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*106*		*80 - 128*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*114*		*76 - 132*

Lab Sample ID: 440-213075-A-8 MS
Matrix: Water
Analysis Batch: 482498

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acrolein	ND		250	209	J	ug/L		84	10 - 147		
Acrylonitrile	ND		2500	2630		ug/L		105	38 - 144		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*110*		*80 - 128*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*76 - 132*

Lab Sample ID: 440-213075-A-8 MSD
Matrix: Water
Analysis Batch: 482498

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acrolein	ND		250	218	J	ug/L		87	10 - 147	4	40
Acrylonitrile	ND		2500	2570		ug/L		103	38 - 144	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*109*		*80 - 128*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*76 - 132*

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

Lab Sample ID: MB 440-482990/4
Matrix: Water
Analysis Batch: 482990

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		50	2.5	ug/L			06/19/18 17:50	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/19/18 17:50*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/19/18 17:50*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*06/19/18 17:50*	*1*

Lab Sample ID: LCS 440-482990/5
Matrix: Water
Analysis Batch: 482990

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acrolein			25.0	23.3	J	ug/L		93	10 - 145		
Acrylonitrile			250	313		ug/L		125	48 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 128*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*76 - 132*

Lab Sample ID: 440-213518-4 MS
Matrix: Water
Analysis Batch: 482990

Client Sample ID: DW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acrolein	ND		25.0	18.3	J	ug/L		73	10 - 147		
Acrylonitrile	ND		250	279		ug/L		112	38 - 144		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 128*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*

Lab Sample ID: 440-213518-4 MSD
Matrix: Water
Analysis Batch: 482990

Client Sample ID: DW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acrolein	ND		25.0	19.0	J	ug/L		76	10 - 147	4	40
Acrylonitrile	ND		250	291		ug/L		116	38 - 144	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 128*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*76 - 132*

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

Lab Sample ID: MB 440-483613/4
Matrix: Water
Analysis Batch: 483613

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 08:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 08:57	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 08:57	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 08:57	1
Acetone	ND		20	10	ug/L			06/22/18 08:57	1
Acetonitrile	ND		20	10	ug/L			06/22/18 08:57	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 08:57	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 08:57	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 08:57	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 08:57	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 08:57	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 08:57	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 08:57	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 08:57	1

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

Lab Sample ID: MB 440-483613/4
Matrix: Water
Analysis Batch: 483613

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 08:57	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Propionitrile	ND		20	10	ug/L			06/22/18 08:57	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 08:57	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 08:57	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 08:57	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 08:57	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 08:57	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 08:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 08:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5.28*	*T J*	*ug/L*		*15.72*			*06/22/18 08:57*	*1*
Unknown	*10.8*	*T J*	*ug/L*		*17.47*			*06/22/18 08:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 08:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*06/22/18 08:57*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*06/22/18 08:57*	*1*

Lab Sample ID: LCS 440-483613/5
Matrix: Water
Analysis Batch: 483613

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	25.3		ug/L		101	63 - 130
1,1,1,2-Tetrachloroethane	25.0	26.5		ug/L		106	60 - 141
1,1,1-Trichloroethane	25.0	26.4		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	63 - 130
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130
1,1-Dichloroethane	25.0	25.6		ug/L		102	64 - 130
1,1-Dichloroethene	25.0	25.1		ug/L		100	70 - 130
1,1-Dichloropropene	25.0	25.6		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	25.0	28.3		ug/L		113	60 - 140
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	52 - 140
1,2-Dichlorobenzene	25.0	27.3		ug/L		109	70 - 130
1,2-Dichloroethane	25.0	26.4		ug/L		106	57 - 138
1,2-Dichloropropane	25.0	25.2		ug/L		101	67 - 130

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

Lab Sample ID: LCS 440-483613/5
Matrix: Water
Analysis Batch: 483613

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	26.6		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	24.3		ug/L		97	70 - 130
1,4-Dichlorobenzene	25.0	26.6		ug/L		107	70 - 130
2,2-Dichloropropane	25.0	27.0		ug/L		108	68 - 141
2-Hexanone	25.0	26.6		ug/L		106	10 - 150
Acetone	25.0	26.0		ug/L		104	10 - 150
Acetonitrile	250	245		ug/L		98	49 - 142
Acrolein	25.0	14.5		ug/L		58	10 - 145
Benzene	25.0	25.7		ug/L		103	68 - 130
Bromoform	25.0	27.7		ug/L		111	60 - 148
Bromomethane	25.0	24.4		ug/L		97	64 - 139
Carbon disulfide	25.0	24.8		ug/L		99	52 - 136
Carbon tetrachloride	25.0	27.2		ug/L		109	60 - 150
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Bromochloromethane	25.0	26.7		ug/L		107	70 - 130
Chloroethane	25.0	23.8		ug/L		95	64 - 135
Chloroform	25.0	26.1		ug/L		104	70 - 130
Chloromethane	25.0	23.9		ug/L		96	47 - 140
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	70 - 133
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 133
Dibromochloromethane	25.0	26.8		ug/L		107	69 - 145
Dibromomethane	25.0	25.7		ug/L		103	70 - 130
Bromodichloromethane	25.0	25.9		ug/L		103	70 - 132
Dichlorodifluoromethane	25.0	21.1		ug/L		84	29 - 150
Ethylbenzene	25.0	26.3		ug/L		105	70 - 130
m,p-Xylene	25.0	25.5		ug/L		102	70 - 130
Methylene Chloride	25.0	23.0		ug/L		92	52 - 130
Methyl tert-butyl ether	25.0	25.3		ug/L		101	63 - 131
Naphthalene	25.0	27.1		ug/L		109	60 - 140
o-Xylene	25.0	25.5		ug/L		102	70 - 130
Styrene	25.0	25.7		ug/L		103	70 - 134
t-Butanol	250	275		ug/L		110	70 - 130
Tetrachloroethene	25.0	26.8		ug/L		107	70 - 130
Toluene	25.0	26.3		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	70 - 132
Trichloroethene	25.0	26.1		ug/L		104	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	60 - 150
Vinyl acetate	25.0	25.0		ug/L		100	48 - 140
Vinyl chloride	25.0	21.8		ug/L		87	59 - 133
1,2-Dibromoethane (EDB)	25.0	25.4		ug/L		102	70 - 130
2-Butanone (MEK)	25.0	22.7		ug/L		91	44 - 150
4-Methyl-2-pentanone (MIBK)	25.0	25.7		ug/L		103	59 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 128*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*76 - 132*

Lab Sample ID: 440-213518-1 MS
Matrix: Water
Analysis Batch: 483613

Client Sample ID: DW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	ND		25.0	25.2		ug/L		101	60 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	26.3		ug/L		105	60 - 149
1,1,1-Trichloroethane	ND		25.0	26.2		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	23.3		ug/L		93	63 - 130
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	70 - 130
1,1-Dichloroethane	ND		25.0	24.8		ug/L		99	65 - 130
1,1-Dichloroethene	ND		25.0	24.1		ug/L		96	70 - 130
1,1-Dichloropropene	ND		25.0	25.2		ug/L		101	64 - 130
1,2,4-Trichlorobenzene	ND		25.0	28.1		ug/L		112	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	23.6		ug/L		95	48 - 140
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	70 - 130
1,2-Dichloroethane	ND		25.0	26.0		ug/L		104	56 - 146
1,2-Dichloropropane	ND		25.0	24.4		ug/L		98	69 - 130
1,3-Dichlorobenzene	ND		25.0	25.2		ug/L		101	70 - 130
1,3-Dichloropropane	ND		25.0	24.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	ND		25.0	25.3		ug/L		101	70 - 130
2,2-Dichloropropane	ND		25.0	26.0		ug/L		104	69 - 138
2-Hexanone	ND		25.0	26.9		ug/L		108	10 - 150
Acetone	ND		25.0	24.7		ug/L		99	10 - 150
Acetonitrile	ND		250	256		ug/L		102	37 - 140
Acrolein	ND		25.0	15.1		ug/L		60	10 - 147
Benzene	ND		25.0	25.2		ug/L		101	66 - 130
Bromoform	ND		25.0	27.7		ug/L		111	59 - 150
Bromomethane	ND		25.0	23.8		ug/L		95	62 - 131
Carbon disulfide	ND		25.0	23.3		ug/L		93	49 - 140
Carbon tetrachloride	ND		25.0	26.4		ug/L		106	60 - 150
Chlorobenzene	ND		25.0	25.6		ug/L		102	70 - 130
Bromochloromethane	ND		25.0	26.3		ug/L		105	70 - 130
Chloroethane	ND		25.0	23.2		ug/L		93	68 - 130
Chloroform	ND		25.0	25.9		ug/L		103	70 - 130
Chloromethane	ND		25.0	22.7		ug/L		91	39 - 144
cis-1,2-Dichloroethene	ND		25.0	25.5		ug/L		102	70 - 130
cis-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	70 - 133
Dibromochloromethane	ND		25.0	26.0		ug/L		104	70 - 148
Dibromomethane	ND		25.0	25.2		ug/L		101	70 - 130
Bromodichloromethane	ND		25.0	25.9		ug/L		104	70 - 138
Dichlorodifluoromethane	ND		25.0	20.6		ug/L		82	25 - 142
Ethylbenzene	ND		25.0	25.6		ug/L		102	70 - 130
m,p-Xylene	ND		25.0	24.6		ug/L		98	70 - 133
Methylene Chloride	ND		25.0	22.8		ug/L		91	52 - 130
Methyl tert-butyl ether	ND		25.0	25.9		ug/L		104	70 - 130
Naphthalene	ND		25.0	26.6		ug/L		106	60 - 140
o-Xylene	ND		25.0	24.7		ug/L		99	70 - 133
Styrene	ND		25.0	25.6		ug/L		102	29 - 150
t-Butanol	ND		250	266		ug/L		106	70 - 130
Tetrachloroethene	ND		25.0	26.0		ug/L		104	70 - 137
Toluene	ND		25.0	25.9		ug/L		104	70 - 130
trans-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	70 - 130
trans-1,3-Dichloropropene	ND		25.0	25.4		ug/L		102	70 - 138
Trichloroethene	ND		25.0	25.2		ug/L		101	70 - 130

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

Lab Sample ID: 440-213518-1 MS
Matrix: Water
Analysis Batch: 483613

Client Sample ID: DW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	ND		25.0	24.7		ug/L		99	60 - 150
Vinyl acetate	ND		25.0	24.8		ug/L		99	23 - 150
Vinyl chloride	ND		25.0	21.3		ug/L		85	50 - 137
1,2-Dibromoethane (EDB)	ND		25.0	25.9		ug/L		104	70 - 131
2-Butanone (MEK)	ND		25.0	24.1		ug/L		97	48 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.7		ug/L		107	52 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 128*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*

Lab Sample ID: 440-213518-1 MSD
Matrix: Water
Analysis Batch: 483613

Client Sample ID: DW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	60 - 130	8	30
1,1,1,2-Tetrachloroethane	ND		25.0	26.1		ug/L		105	60 - 149	1	20
1,1,1-Trichloroethane	ND		25.0	25.8		ug/L		103	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.9		ug/L		88	63 - 130	6	30
1,1,2-Trichloroethane	ND		25.0	24.6		ug/L		98	70 - 130	1	25
1,1-Dichloroethane	ND		25.0	24.7		ug/L		99	65 - 130	1	20
1,1-Dichloroethene	ND		25.0	23.9		ug/L		96	70 - 130	0	20
1,1-Dichloropropene	ND		25.0	25.1		ug/L		101	64 - 130	0	20
1,2,4-Trichlorobenzene	ND		25.0	27.1		ug/L		108	60 - 140	4	20
1,2-Dibromo-3-Chloropropane	ND		25.0	21.6		ug/L		86	48 - 140	9	30
1,2-Dichlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	ND		25.0	25.2		ug/L		101	56 - 146	3	20
1,2-Dichloropropane	ND		25.0	24.6		ug/L		98	69 - 130	0	20
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	70 - 130	2	20
1,3-Dichloropropane	ND		25.0	23.7		ug/L		95	70 - 130	3	25
1,4-Dichlorobenzene	ND		25.0	24.6		ug/L		99	70 - 130	3	20
2,2-Dichloropropane	ND		25.0	26.0		ug/L		104	69 - 138	0	25
2-Hexanone	ND		25.0	25.4		ug/L		102	10 - 150	6	35
Acetone	ND		25.0	23.4		ug/L		94	10 - 150	5	35
Acetonitrile	ND		250	235		ug/L		94	37 - 140	8	40
Acrolein	ND		25.0	14.6		ug/L		59	10 - 147	3	40
Benzene	ND		25.0	25.0		ug/L		100	66 - 130	1	20
Bromoform	ND		25.0	26.6		ug/L		106	59 - 150	4	25
Bromomethane	ND		25.0	23.2		ug/L		93	62 - 131	3	25
Carbon disulfide	ND		25.0	23.4		ug/L		94	49 - 140	0	20
Carbon tetrachloride	ND		25.0	26.1		ug/L		104	60 - 150	1	25
Chlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130	2	20
Bromochloromethane	ND		25.0	25.9		ug/L		104	70 - 130	2	25
Chloroethane	ND		25.0	22.8		ug/L		91	68 - 130	2	25
Chloroform	ND		25.0	25.0		ug/L		100	70 - 130	3	20
Chloromethane	ND		25.0	22.0		ug/L		88	39 - 144	3	25

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

Lab Sample ID: 440-213518-1 MSD
Matrix: Water
Analysis Batch: 483613

Client Sample ID: DW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	ND		25.0	25.4		ug/L		102	70 - 130	0	20
cis-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	70 - 133	2	20
Dibromochloromethane	ND		25.0	25.8		ug/L		103	70 - 148	1	25
Dibromomethane	ND		25.0	24.3		ug/L		97	70 - 130	4	25
Bromodichloromethane	ND		25.0	25.4		ug/L		102	70 - 138	2	20
Dichlorodifluoromethane	ND		25.0	21.1		ug/L		84	25 - 142	2	30
Ethylbenzene	ND		25.0	25.4		ug/L		102	70 - 130	1	20
m,p-Xylene	ND		25.0	24.4		ug/L		98	70 - 133	1	25
Methylene Chloride	ND		25.0	22.3		ug/L		89	52 - 130	2	20
Methyl tert-butyl ether	ND		25.0	25.3		ug/L		101	70 - 130	3	25
Naphthalene	ND		25.0	25.1		ug/L		100	60 - 140	6	30
o-Xylene	ND		25.0	24.0		ug/L		96	70 - 133	3	20
Styrene	ND		25.0	25.0		ug/L		100	29 - 150	2	35
t-Butanol	ND		250	256		ug/L		102	70 - 130	4	25
Tetrachloroethene	ND		25.0	25.8		ug/L		103	70 - 137	1	20
Toluene	ND		25.0	25.8		ug/L		103	70 - 130	1	20
trans-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	70 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	25.1		ug/L		101	70 - 138	1	25
Trichloroethene	ND		25.0	25.4		ug/L		102	70 - 130	1	20
Trichlorofluoromethane	ND		25.0	24.5		ug/L		98	60 - 150	1	25
Vinyl acetate	ND		25.0	24.8		ug/L		99	23 - 150	0	30
Vinyl chloride	ND		25.0	20.9		ug/L		84	50 - 137	2	30
1,2-Dibromoethane (EDB)	ND		25.0	24.8		ug/L		99	70 - 131	4	25
2-Butanone (MEK)	ND		25.0	22.4		ug/L		90	48 - 140	7	40
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.6		ug/L		98	52 - 150	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 128*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-482875/1-A
Matrix: Water
Analysis Batch: 483345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.99	0.25	ug/L		06/19/18 09:09	06/21/18 08:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*66*		*30 - 120*	*06/19/18 09:09*	*06/21/18 08:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-482875/3-A
Matrix: Water
Analysis Batch: 483345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482875

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.96	1.43		ug/L		73	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*68*		*30 - 120*

Lab Sample ID: LCSD 440-482875/4-A
Matrix: Water
Analysis Batch: 483345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 482875

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			1.96	1.52		ug/L		77	35 - 120	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*70*		*30 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-481846/42
Matrix: Water
Analysis Batch: 481846

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 00:22	1

Lab Sample ID: LCS 440-481846/43
Matrix: Water
Analysis Batch: 481846

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.13	1.07		mg/L		95	90 - 110		

Lab Sample ID: 440-213518-2 MS
Matrix: Water
Analysis Batch: 481846

Client Sample ID: DW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	ND		1.13	1.02		mg/L		91	80 - 120		

Lab Sample ID: 440-213518-2 MSD
Matrix: Water
Analysis Batch: 481846

Client Sample ID: DW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		1.13	1.03		mg/L		91	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 440-481847/42
Matrix: Water
Analysis Batch: 481847

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			06/14/18 00:22	1
Chloride	ND		0.50	0.25	mg/L			06/14/18 00:22	1
Fluoride	ND		0.50	0.25	mg/L			06/14/18 00:22	1
Sulfate	ND		0.50	0.25	mg/L			06/14/18 00:22	1

Lab Sample ID: LCS 440-481847/43
Matrix: Water
Analysis Batch: 481847

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	5.00	4.84		mg/L		97	90 - 110
Chloride	5.00	4.67		mg/L		93	90 - 110
Fluoride	5.00	5.03		mg/L		101	90 - 110
Sulfate	5.00	4.88		mg/L		98	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-213518-2 MS
Matrix: Water
Analysis Batch: 481847

Client Sample ID: DW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide - DL	0.29	J	5.00	4.89		mg/L		92	80 - 120
Chloride - DL	11		5.00	16.1		mg/L		106	80 - 120
Fluoride - DL	0.51		5.00	5.54		mg/L		101	80 - 120
Sulfate - DL	1600	E	5.00	1570	E 4	mg/L		26	80 - 120

Lab Sample ID: 440-213518-2 MSD
Matrix: Water
Analysis Batch: 481847

Client Sample ID: DW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide - DL	0.29	J	5.00	4.85		mg/L		91	80 - 120	1	20
Chloride - DL	11		5.00	16.1		mg/L		106	80 - 120	0	20
Fluoride - DL	0.51		5.00	5.57		mg/L		101	80 - 120	1	20
Sulfate - DL	1600	E	5.00	1570	E 4	mg/L		42	80 - 120	0	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-483392/1-A
Matrix: Water
Analysis Batch: 483904

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		0.50	0.25	mg/L		06/21/18 09:43	06/23/18 11:21	1
Manganese	ND		0.020	0.015	mg/L		06/21/18 09:43	06/23/18 11:21	1
Magnesium	ND		0.020	0.010	mg/L		06/21/18 09:43	06/23/18 11:21	1
Iron	ND		0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:21	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 440-483392/1-A
Matrix: Water
Analysis Batch: 483904

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	0.366	J	0.50	0.26	mg/L		06/21/18 09:43	06/23/18 11:21	1
Calcium	0.0860	J	0.10	0.050	mg/L		06/21/18 09:43	06/23/18 11:21	1
Boron	ND		0.050	0.025	mg/L		06/21/18 09:43	06/23/18 11:21	1

Lab Sample ID: MB 440-483392/1-A
Matrix: Water
Analysis Batch: 483901

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	1.39		0.50	0.26	mg/L		06/21/18 09:43	06/23/18 12:47	1

Lab Sample ID: LCS 440-483392/2-A
Matrix: Water
Analysis Batch: 483904

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10.0	10.1		mg/L		101	80 - 120
Manganese	1.00	0.992		mg/L		99	80 - 120
Magnesium	5.00	4.88		mg/L		98	80 - 120
Iron	1.00	1.01		mg/L		101	80 - 120
Sodium	10.0	10.4		mg/L		104	80 - 120
Calcium	5.00	5.07		mg/L		101	80 - 120
Boron	1.00	0.994		mg/L		99	80 - 120

Lab Sample ID: LCS 440-483392/2-A
Matrix: Water
Analysis Batch: 483901

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	10.7		mg/L		107	80 - 120

Lab Sample ID: 440-213518-1 MS
Matrix: Water
Analysis Batch: 483904

Client Sample ID: DW-1
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	2.5		10.0	12.9		mg/L		105	75 - 125
Manganese	ND		1.00	0.973		mg/L		97	75 - 125
Magnesium	1.5		5.00	6.16		mg/L		94	75 - 125
Iron	ND		1.00	1.06		mg/L		106	75 - 125
Calcium	2.8	B	5.00	7.62		mg/L		97	75 - 125
Boron	2.1		1.00	3.11		mg/L		102	75 - 125

Lab Sample ID: 440-213518-1 MS
Matrix: Water
Analysis Batch: 483901

Client Sample ID: DW-1
Prep Type: Total Recoverable
Prep Batch: 483392

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	1100	B	10.0	1160	4	mg/L		154	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-213518-1 MSD — **Client Sample ID: DW-1**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 483904 — **Prep Batch: 483392**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	2.5		10.0	13.0		mg/L		105	75 - 125	0	20
Manganese	ND		1.00	0.966		mg/L		97	75 - 125	1	20
Magnesium	1.5		5.00	6.12		mg/L		93	75 - 125	1	20
Iron	ND		1.00	1.02		mg/L		102	75 - 125	4	20
Calcium	2.8	B	5.00	7.55		mg/L		95	75 - 125	1	20
Boron	2.1		1.00	3.12		mg/L		103	75 - 125	0	20

Lab Sample ID: 440-213518-1 MSD — **Client Sample ID: DW-1**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 483901 — **Prep Batch: 483392**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	1100	B	10.0	1180	4	mg/L		329	75 - 125	1	20

Method: 410.4 - COD

Lab Sample ID: MB 440-483463/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:55	1

Lab Sample ID: LCS 440-483463/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	199		mg/L		99	90 - 110

Lab Sample ID: 440-213518-1 MS — **Client Sample ID: DW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	11	J	200	207		mg/L		98	70 - 120

Lab Sample ID: 440-213518-1 MSD — **Client Sample ID: DW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	11	J	200	207		mg/L		98	70 - 120	0	15

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 440-484151/5
Matrix: Water
Analysis Batch: 484151

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	80.0	70.1	*	mg/L		88	90 - 110

Lab Sample ID: LCS 440-484151/6
Matrix: Water
Analysis Batch: 484151

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	80.0	84.2		mg/L		105	90 - 110

Lab Sample ID: LCS 440-484151/7
Matrix: Water
Analysis Batch: 484151

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	80.0	76.1		mg/L		95	90 - 110

Lab Sample ID: LCS 440-484151/8
Matrix: Water
Analysis Batch: 484151

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	80.0	75.5		mg/L		94	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-482100/3
Matrix: Water
Analysis Batch: 482100

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/14/18 05:18	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/14/18 05:18	1

Lab Sample ID: LCS 440-482100/2
Matrix: Water
Analysis Batch: 482100

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	98.9	97.0		mg/L		98	80 - 120

Lab Sample ID: 440-213518-1 DU
Matrix: Water
Analysis Batch: 482100

Client Sample ID: DW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity as CaCO3	520		528		mg/L		1	20
Bicarbonate Alkalinity as CaCO3	420		431		mg/L		2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-483125/1
Matrix: Water
Analysis Batch: 483125

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			06/20/18 09:59	1

Lab Sample ID: LCS 440-483125/2
Matrix: Water
Analysis Batch: 483125

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	992		mg/L		99	90 - 110

Lab Sample ID: 440-213518-1 DU
Matrix: Water
Analysis Batch: 483125

Client Sample ID: DW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	3200		3160		mg/L		0.2	5

Method: SM 4500 CO2 C - Free Carbon Dioxide

Lab Sample ID: MB 440-483440/1
Matrix: Water
Analysis Batch: 483440

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free	ND		2.0	2.0	mg/L			06/21/18 11:48	1

Lab Sample ID: 440-213374-I-1 DU
Matrix: Water
Analysis Batch: 483440

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon Dioxide, Free	70		68.6		mg/L		3	20

Method: SM 4500 NH3 D - Ammonia

Lab Sample ID: MB 440-482564/2-A
Matrix: Water
Analysis Batch: 482583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.50	0.10	mg/L		06/18/18 04:00	06/18/18 07:00	1

Lab Sample ID: LCS 440-482564/1-A
Matrix: Water
Analysis Batch: 482583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	2.50	2.24		mg/L		90	85 - 115

Method: SM 4500 NH3 D - Ammonia (Continued)

Lab Sample ID: MRL 440-482564/21-A
Matrix: Water
Analysis Batch: 482583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482564

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia (as N)			0.500	0.494	J	mg/L		99	10 - 200		

Lab Sample ID: 440-213616-A-1-C MS
Matrix: Water
Analysis Batch: 482583

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 482564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia (as N)	0.85		2.50	3.22		mg/L		95	75 - 125		

Lab Sample ID: 440-213616-A-1-D MSD
Matrix: Water
Analysis Batch: 482583

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 482564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	0.85		2.50	3.10		mg/L		90	75 - 125	4	15

Lab Sample ID: 440-213616-A-1-B DU
Matrix: Water
Analysis Batch: 482583

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 482564

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia (as N)	0.85		0.879		mg/L		4	15

Lab Sample ID: MB 440-484187/2-A
Matrix: Water
Analysis Batch: 484212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.50	0.10	mg/L		06/26/18 04:00	06/26/18 06:00	1

Lab Sample ID: LCS 440-484187/1-A
Matrix: Water
Analysis Batch: 484212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484187

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia (as N)			2.50	2.33		mg/L		93	85 - 115		

Lab Sample ID: 440-214325-A-3-B MS
Matrix: Water
Analysis Batch: 484212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 484187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia (as N)	ND		2.50	2.50		mg/L		100	75 - 125		

Lab Sample ID: 440-214325-A-3-C MSD
Matrix: Water
Analysis Batch: 484212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 484187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	ND		2.50	2.50		mg/L		100	75 - 125	0	15

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 440-482933/3
Matrix: Water
Analysis Batch: 482933

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:38	1

Lab Sample ID: LCS 440-482933/4
Matrix: Water
Analysis Batch: 482933

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Sulfide	0.460	0.451		mg/L		98	80 - 120

Lab Sample ID: LCSD 440-482933/5
Matrix: Water
Analysis Batch: 482933

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Sulfide	0.460	0.455		mg/L		99	80 - 120	1	20

Lab Sample ID: 550-104381-A-1 MS
Matrix: Water
Analysis Batch: 482933

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Sulfide	ND		0.460	0.442		mg/L		96	70 - 130

Lab Sample ID: 550-104381-A-1 MSD
Matrix: Water
Analysis Batch: 482933

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Sulfide	ND		0.460	0.395		mg/L		86	70 - 130	11	30

Method: SM 5310C - TOC

Lab Sample ID: MB 440-482280/8
Matrix: Water
Analysis Batch: 482280

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		0.10	0.050	mg/L			06/14/18 10:23	1

Lab Sample ID: LCS 440-482280/7
Matrix: Water
Analysis Batch: 482280

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.83		mg/L		98	90 - 110

Method: SM 5310C - TOC (Continued)

Lab Sample ID: MRL 440-482280/4
Matrix: Water
Analysis Batch: 482280

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			0.100	0.0761	J	mg/L		76	50 - 150		

Lab Sample ID: 440-213374-H-1 MS
Matrix: Water
Analysis Batch: 482280

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	6.5		10.0	16.9		mg/L		105	80 - 120		

Lab Sample ID: 440-213374-H-1 MSD
Matrix: Water
Analysis Batch: 482280

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	6.5		10.0	16.9		mg/L		105	80 - 120	0	20

Lab Sample ID: MB 440-482361/6
Matrix: Water
Analysis Batch: 482361

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		0.10	0.050	mg/L			06/15/18 07:51	1

Lab Sample ID: LCS 440-482361/5
Matrix: Water
Analysis Batch: 482361

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			10.0	10.8		mg/L		108	90 - 110		

Lab Sample ID: MRL 440-482361/4
Matrix: Water
Analysis Batch: 482361

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			0.100	0.126		mg/L		126	50 - 150		

Lab Sample ID: 440-213518-3 MS
Matrix: Water
Analysis Batch: 482361

Client Sample ID: DW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	0.34		10.0	10.8		mg/L		105	80 - 120		

Lab Sample ID: 440-213518-3 MSD
Matrix: Water
Analysis Batch: 482361

Client Sample ID: DW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	0.34		10.0	10.5		mg/L		102	80 - 120	3	20

GC/MS VOA

Analysis Batch: 482498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	8260B	
440-213518-2	DW-2	Total/NA	Water	8260B	
440-213518-3	DW-3	Total/NA	Water	8260B	
MB 440-482498/4	Method Blank	Total/NA	Water	8260B	
LCS 440-482498/5	Lab Control Sample	Total/NA	Water	8260B	
440-213075-A-8 MS	Matrix Spike	Total/NA	Water	8260B	
440-213075-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 482990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-4	DW-5	Total/NA	Water	8260B	
440-213518-5	MW-1	Total/NA	Water	8260B	
440-213518-6	MW-9	Total/NA	Water	8260B	
440-213518-7	Extraction Trench	Total/NA	Water	8260B	
440-213518-8	QCAB	Total/NA	Water	8260B	
440-213518-9	QCTB	Total/NA	Water	8260B	
MB 440-482990/4	Method Blank	Total/NA	Water	8260B	
LCS 440-482990/5	Lab Control Sample	Total/NA	Water	8260B	
440-213518-4 MS	DW-5	Total/NA	Water	8260B	
440-213518-4 MSD	DW-5	Total/NA	Water	8260B	

Analysis Batch: 483613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	8260B	
440-213518-2	DW-2	Total/NA	Water	8260B	
440-213518-3	DW-3	Total/NA	Water	8260B	
440-213518-4	DW-5	Total/NA	Water	8260B	
440-213518-5	MW-1	Total/NA	Water	8260B	
440-213518-6	MW-9	Total/NA	Water	8260B	
440-213518-7	Extraction Trench	Total/NA	Water	8260B	
440-213518-8	QCAB	Total/NA	Water	8260B	
440-213518-9	QCTB	Total/NA	Water	8260B	
MB 440-483613/4	Method Blank	Total/NA	Water	8260B	
LCS 440-483613/5	Lab Control Sample	Total/NA	Water	8260B	
440-213518-1 MS	DW-1	Total/NA	Water	8260B	
440-213518-1 MSD	DW-1	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 482875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	3520C	
440-213518-2	DW-2	Total/NA	Water	3520C	
440-213518-3	DW-3	Total/NA	Water	3520C	
440-213518-4	DW-5	Total/NA	Water	3520C	
440-213518-5	MW-1	Total/NA	Water	3520C	
440-213518-6	MW-9	Total/NA	Water	3520C	
440-213518-7	Extraction Trench	Total/NA	Water	3520C	
MB 440-482875/1-A	Method Blank	Total/NA	Water	3520C	
LCS 440-482875/3-A	Lab Control Sample	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 482875 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 440-482875/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 483345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	8270C	482875
440-213518-2	DW-2	Total/NA	Water	8270C	482875
440-213518-3	DW-3	Total/NA	Water	8270C	482875
440-213518-4	DW-5	Total/NA	Water	8270C	482875
440-213518-5	MW-1	Total/NA	Water	8270C	482875
440-213518-6	MW-9	Total/NA	Water	8270C	482875
440-213518-7	Extraction Trench	Total/NA	Water	8270C	482875
MB 440-482875/1-A	Method Blank	Total/NA	Water	8270C	482875
LCS 440-482875/3-A	Lab Control Sample	Total/NA	Water	8270C	482875
LCSD 440-482875/4-A	Lab Control Sample Dup	Total/NA	Water	8270C	482875

HPLC/IC

Analysis Batch: 481846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	300.0	
440-213518-2	DW-2	Total/NA	Water	300.0	
440-213518-3	DW-3	Total/NA	Water	300.0	
440-213518-4	DW-5	Total/NA	Water	300.0	
440-213518-5	MW-1	Total/NA	Water	300.0	
440-213518-6	MW-9	Total/NA	Water	300.0	
440-213518-7	Extraction Trench	Total/NA	Water	300.0	
MB 440-481846/42	Method Blank	Total/NA	Water	300.0	
LCS 440-481846/43	Lab Control Sample	Total/NA	Water	300.0	
440-213518-2 MS	DW-2	Total/NA	Water	300.0	
440-213518-2 MSD	DW-2	Total/NA	Water	300.0	

Analysis Batch: 481847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	300.0	
440-213518-1	DW-1	Total/NA	Water	300.0	
440-213518-2 - DL	DW-2	Total/NA	Water	300.0	
440-213518-2	DW-2	Total/NA	Water	300.0	
440-213518-3	DW-3	Total/NA	Water	300.0	
440-213518-3	DW-3	Total/NA	Water	300.0	
440-213518-4	DW-5	Total/NA	Water	300.0	
440-213518-5	MW-1	Total/NA	Water	300.0	
440-213518-5	MW-1	Total/NA	Water	300.0	
440-213518-6	MW-9	Total/NA	Water	300.0	
440-213518-6	MW-9	Total/NA	Water	300.0	
440-213518-7	Extraction Trench	Total/NA	Water	300.0	
440-213518-7	Extraction Trench	Total/NA	Water	300.0	
MB 440-481847/42	Method Blank	Total/NA	Water	300.0	
LCS 440-481847/43	Lab Control Sample	Total/NA	Water	300.0	
440-213518-2 MS - DL	DW-2	Total/NA	Water	300.0	
440-213518-2 MSD - DL	DW-2	Total/NA	Water	300.0	

Metals

Prep Batch: 483392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total Recoverable	Water	3005A	
440-213518-2	DW-2	Total Recoverable	Water	3005A	
440-213518-3	DW-3	Total Recoverable	Water	3005A	
440-213518-4	DW-5	Total Recoverable	Water	3005A	
440-213518-5	MW-1	Total Recoverable	Water	3005A	
440-213518-6	MW-9	Total Recoverable	Water	3005A	
440-213518-7	Extraction Trench	Total Recoverable	Water	3005A	
MB 440-483392/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-483392/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-213518-1 MS	DW-1	Total Recoverable	Water	3005A	
440-213518-1 MSD	DW-1	Total Recoverable	Water	3005A	

Analysis Batch: 483901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total Recoverable	Water	6010B	483392
440-213518-2	DW-2	Total Recoverable	Water	6010B	483392
440-213518-3	DW-3	Total Recoverable	Water	6010B	483392
440-213518-4	DW-5	Total Recoverable	Water	6010B	483392
440-213518-5	MW-1	Total Recoverable	Water	6010B	483392
440-213518-6	MW-9	Total Recoverable	Water	6010B	483392
440-213518-7	Extraction Trench	Total Recoverable	Water	6010B	483392
MB 440-483392/1-A	Method Blank	Total Recoverable	Water	6010B	483392
LCS 440-483392/2-A	Lab Control Sample	Total Recoverable	Water	6010B	483392
440-213518-1 MS	DW-1	Total Recoverable	Water	6010B	483392
440-213518-1 MSD	DW-1	Total Recoverable	Water	6010B	483392

Analysis Batch: 483904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total Recoverable	Water	6010B	483392
440-213518-2	DW-2	Total Recoverable	Water	6010B	483392
440-213518-3	DW-3	Total Recoverable	Water	6010B	483392
440-213518-4	DW-5	Total Recoverable	Water	6010B	483392
440-213518-5	MW-1	Total Recoverable	Water	6010B	483392
440-213518-6	MW-9	Total Recoverable	Water	6010B	483392
440-213518-7	Extraction Trench	Total Recoverable	Water	6010B	483392
MB 440-483392/1-A	Method Blank	Total Recoverable	Water	6010B	483392
LCS 440-483392/2-A	Lab Control Sample	Total Recoverable	Water	6010B	483392
440-213518-1 MS	DW-1	Total Recoverable	Water	6010B	483392
440-213518-1 MSD	DW-1	Total Recoverable	Water	6010B	483392

General Chemistry

Analysis Batch: 482100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 2320B	
440-213518-2	DW-2	Total/NA	Water	SM 2320B	
440-213518-3	DW-3	Total/NA	Water	SM 2320B	
440-213518-4	DW-5	Total/NA	Water	SM 2320B	
440-213518-5	MW-1	Total/NA	Water	SM 2320B	
440-213518-6	MW-9	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 482100 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-7	Extraction Trench	Total/NA	Water	SM 2320B	
MB 440-482100/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-482100/2	Lab Control Sample	Total/NA	Water	SM 2320B	
440-213518-1 DU	DW-1	Total/NA	Water	SM 2320B	

Analysis Batch: 482280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 5310C	
440-213518-2	DW-2	Total/NA	Water	SM 5310C	
440-213518-4	DW-5	Total/NA	Water	SM 5310C	
440-213518-5	MW-1	Total/NA	Water	SM 5310C	
440-213518-6	MW-9	Total/NA	Water	SM 5310C	
440-213518-7	Extraction Trench	Total/NA	Water	SM 5310C	
MB 440-482280/8	Method Blank	Total/NA	Water	SM 5310C	
LCS 440-482280/7	Lab Control Sample	Total/NA	Water	SM 5310C	
MRL 440-482280/4	Lab Control Sample	Total/NA	Water	SM 5310C	
440-213374-H-1 MS	Matrix Spike	Total/NA	Water	SM 5310C	
440-213374-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310C	

Analysis Batch: 482361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-3	DW-3	Total/NA	Water	SM 5310C	
MB 440-482361/6	Method Blank	Total/NA	Water	SM 5310C	
LCS 440-482361/5	Lab Control Sample	Total/NA	Water	SM 5310C	
MRL 440-482361/4	Lab Control Sample	Total/NA	Water	SM 5310C	
440-213518-3 MS	DW-3	Total/NA	Water	SM 5310C	
440-213518-3 MSD	DW-3	Total/NA	Water	SM 5310C	

Prep Batch: 482564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 4500 NH3 B	
440-213518-2	DW-2	Total/NA	Water	SM 4500 NH3 B	
440-213518-3	DW-3	Total/NA	Water	SM 4500 NH3 B	
MB 440-482564/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 440-482564/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
MRL 440-482564/21-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
440-213616-A-1-C MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 B	
440-213616-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 B	
440-213616-A-1-B DU	Duplicate	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 482583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 4500 NH3 D	482564
440-213518-2	DW-2	Total/NA	Water	SM 4500 NH3 D	482564
440-213518-3	DW-3	Total/NA	Water	SM 4500 NH3 D	482564
MB 440-482564/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 D	482564
LCS 440-482564/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	482564
MRL 440-482564/21-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	482564
440-213616-A-1-C MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 D	482564
440-213616-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 D	482564
440-213616-A-1-B DU	Duplicate	Total/NA	Water	SM 4500 NH3 D	482564

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Analysis Batch: 482933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 4500 S2 D	
440-213518-2	DW-2	Total/NA	Water	SM 4500 S2 D	
440-213518-3	DW-3	Total/NA	Water	SM 4500 S2 D	
440-213518-4	DW-5	Total/NA	Water	SM 4500 S2 D	
440-213518-5	MW-1	Total/NA	Water	SM 4500 S2 D	
440-213518-6	MW-9	Total/NA	Water	SM 4500 S2 D	
440-213518-7	Extraction Trench	Total/NA	Water	SM 4500 S2 D	
MB 440-482933/3	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 440-482933/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 440-482933/5	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
550-104381-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 S2 D	
550-104381-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 483125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 2540C	
440-213518-2	DW-2	Total/NA	Water	SM 2540C	
440-213518-3	DW-3	Total/NA	Water	SM 2540C	
440-213518-4	DW-5	Total/NA	Water	SM 2540C	
440-213518-5	MW-1	Total/NA	Water	SM 2540C	
440-213518-6	MW-9	Total/NA	Water	SM 2540C	
440-213518-7	Extraction Trench	Total/NA	Water	SM 2540C	
MB 440-483125/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-483125/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-213518-1 DU	DW-1	Total/NA	Water	SM 2540C	

Analysis Batch: 483440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	SM 4500 CO2 C	
440-213518-2	DW-2	Total/NA	Water	SM 4500 CO2 C	
440-213518-3	DW-3	Total/NA	Water	SM 4500 CO2 C	
440-213518-4	DW-5	Total/NA	Water	SM 4500 CO2 C	
440-213518-5	MW-1	Total/NA	Water	SM 4500 CO2 C	
440-213518-6	MW-9	Total/NA	Water	SM 4500 CO2 C	
440-213518-7	Extraction Trench	Total/NA	Water	SM 4500 CO2 C	
MB 440-483440/1	Method Blank	Total/NA	Water	SM 4500 CO2 C	
440-213374-I-1 DU	Duplicate	Total/NA	Water	SM 4500 CO2 C	

Analysis Batch: 483463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-1	DW-1	Total/NA	Water	410.4	
440-213518-2	DW-2	Total/NA	Water	410.4	
440-213518-3	DW-3	Total/NA	Water	410.4	
440-213518-4	DW-5	Total/NA	Water	410.4	
440-213518-5	MW-1	Total/NA	Water	410.4	
440-213518-6	MW-9	Total/NA	Water	410.4	
440-213518-7	Extraction Trench	Total/NA	Water	410.4	
MB 440-483463/3	Method Blank	Total/NA	Water	410.4	
LCS 440-483463/4	Lab Control Sample	Total/NA	Water	410.4	
440-213518-1 MS	DW-1	Total/NA	Water	410.4	
440-213518-1 MSD	DW-1	Total/NA	Water	410.4	

General Chemistry (Continued)

Analysis Batch: 484151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-484151/5	Lab Control Sample	Total/NA	Water	410.4	
LCS 440-484151/6	Lab Control Sample	Total/NA	Water	410.4	
LCS 440-484151/7	Lab Control Sample	Total/NA	Water	410.4	
LCS 440-484151/8	Lab Control Sample	Total/NA	Water	410.4	

Prep Batch: 484187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-4	DW-5	Total/NA	Water	SM 4500 NH3 B	
440-213518-5	MW-1	Total/NA	Water	SM 4500 NH3 B	
440-213518-6	MW-9	Total/NA	Water	SM 4500 NH3 B	
440-213518-7	Extraction Trench	Total/NA	Water	SM 4500 NH3 B	
MB 440-484187/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 440-484187/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
440-214325-A-3-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 B	
440-214325-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 484212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213518-4	DW-5	Total/NA	Water	SM 4500 NH3 D	484187
440-213518-5	MW-1	Total/NA	Water	SM 4500 NH3 D	484187
440-213518-6	MW-9	Total/NA	Water	SM 4500 NH3 D	484187
440-213518-7	Extraction Trench	Total/NA	Water	SM 4500 NH3 D	484187
MB 440-484187/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 D	484187
LCS 440-484187/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	484187
440-214325-A-3-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 D	484187
440-214325-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 D	484187

Qualifiers

GC/MS VOA

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

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
N	Presumptive evidence of material.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213518-1

Laboratory: TestAmerica Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-18 *
Arizona	State Program	9	AZ0671	10-14-18
California	LA Cty Sanitation Districts	9	10256	06-30-18 *
California	State Program	9	CA ELAP 2706	06-30-18 *
Guam	State Program	9	Cert. No. 17-003R	01-23-19
Hawaii	State Program	9	N/A	01-29-19
Kansas	NELAP	7	E-10420	07-31-18
Nevada	State Program	9	CA015312018-1	07-31-18
New Mexico	State Program	6	N/A	01-29-19
Oregon	NELAP	10	4028	01-29-19
USDA	Federal		P330-15-00184	07-08-18 *
Washington	State Program	10	C900	09-03-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

201016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact			
Company Name: GLA / Republic	Project Manager: Kyle Welchell	Site Contact: Josh Mills	Date: 6-13-18
Address: 11415 W. Bernardo Ct	Tel/Fax: 858-451-1136	Lab Contact: Urvashi	Carrier: TA
City/State/Zip: S.D., CA 92127	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS		COC No: 1 of 1 COCs
Phone 858-451-1136	TAT if different from Below ______		Sampler: BS, MC
Fax 858-451-1087	☐ 2 weeks		For Lab Use Only: Walk-in Client: Lab Sampling
Project Name: Republic Services	☐ 1 week		
Site: Sunshine Cyn. Landfill	☐ 2 days		Job / SDG No.:
P O # 4400785 1	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 8260B-VOCs	EPA 8270 1,4-Dioxane	Total Alkalinity and Bicarbonate	Ammonia as N 350.2	COD EPA 410.4	Chloride, Bromide	Nitrate-N, Sulfate	6010B Total: B, Ca, Fe, Mg,	Mn, K, Na	TDS (EPA 160.1)	TOC (EPA 415.1)	Flouride (340.2)	Sulfide (376.2)	SM-4500-CO2 C	Carbon Dioxide	Sample Specific Notes:
DW-1	6/13/18	1015	G	GW	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DW-2	↓	1154	↓	↓	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DW-3	↓	1315	↓	↓	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DW-5	↓	0938	↓	↓	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MW-1	↓	1025	↓	↓	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MW-9	↓	0815	↓	↓	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Extraction Trench	↓	1120	↓	WW	13			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
QCAB	↓	—	↓	LAB DI,	4			X															
QCTB	↓	—	↓	"	4			X															

440-213518 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments: 8260 includes all 40 CFR part 258 Appx I VOCs Dichlorodifluoromethane, MTBE, and 1,4-Dioxane.
1.3/1.3 0.5/0.5 0.8/0.8

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd ______ Corr'd ______		Therm ID No. IRSC6
Relinquished by: [signature]	Company: Geo-Logic (GLR)	Date/Time: 6/13/18 1436	Received by: [signature]	Company: TA	Date/Time: 6-13-18 1430
Relinquished by: [signature]	Company: TA	Date/Time: 6-13-18 1830	Received by:	Company:	Date/Time:
Relinquished by	Company	Date/Time:	Received in Laboratory by: [signature]	Company: TA IRV	Date/Time: 6/13/18 1830

6/27/2018

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 440-213518-1

Login Number: 213518

List Source: TestAmerica Irvine

List Number: 1

Creator: Soderblom, Tim

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-213600-1
Client Project/Site: Republic Sunshine Canyon

For:
Geo-Logic Associates
11415 West Bernardo Court
Suite 200
San Diego, California 92127

Attn: Kyle Welchans

Authorized for release by:
6/28/2018 6:26:22 PM

Rossina Tomova, Project Manager I
(949)261-1022
rossina.tomova@testamericainc.com

Table of Contents

Sample Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-213600-1	PZ-4	Water	06/14/18 10:30	06/14/18 15:30
440-213600-2	MW-2A	Water	06/14/18 10:35	06/14/18 15:30
440-213600-3	MW-2B	Water	06/14/18 09:10	06/14/18 15:30
440-213600-4	DW-4	Water	06/14/18 07:58	06/14/18 15:30
440-213600-5	QCAB	Water	06/14/18 00:01	06/14/18 15:30
440-213600-6	QCTB	Water	06/14/18 00:01	06/14/18 15:30

Job ID: 440-213600-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-213600-1

Comments
No additional comments.

Receipt
The samples were received on 6/14/2018 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

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

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

HPLC/IC
Method(s) 300.0: The following sample was diluted due to the nature of the sample matrix: DW-4 (440-213600-4). Elevated reporting limits (RLs) are provided.

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

Metals
Method(s) 6010B: The method blank for preparation batch 440-483476 and analytical batch 440-484640 contained Sodium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The continuing calibration blank (CCB) for analytical batch 440-484640 contained Sodium above the method detection limit (MDL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

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

Organic Prep
Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-483148.

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

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

Client Sample ID: PZ-4
Date Collected: 06/14/18 10:30
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 15:50	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Acrolein	ND		50	2.5	ug/L			06/20/18 00:43	1
Acrylonitrile	ND		50	1.0	ug/L			06/20/18 00:43	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 15:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 15:50	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 15:50	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 15:50	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 15:50	1
Acetone	ND		20	10	ug/L			06/22/18 15:50	1
Acetonitrile	ND		20	10	ug/L			06/22/18 15:50	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 15:50	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 15:50	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 15:50	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 15:50	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 15:50	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 15:50	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 15:50	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 15:50	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 15:50	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 15:50	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 15:50	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 15:50	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 15:50	1

Client Sample ID: PZ-4
Date Collected: 06/14/18 10:30
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 15:50	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 15:50	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Propionitrile	ND		20	10	ug/L			06/22/18 15:50	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 15:50	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 15:50	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 15:50	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 15:50	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 15:50	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 15:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 15:50	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 15:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 15:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 15:50*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*15.32*			*06/22/18 15:50*	*1*
Unknown	*12*	*T J*	*ug/L*		*17.12*			*06/22/18 15:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/20/18 00:43*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/20/18 00:43*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/22/18 15:50*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 15:50*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/20/18 00:43*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/22/18 15:50*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.93	0.23	ug/L		06/20/18 10:46	06/21/18 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*79*		*30 - 120*	*06/20/18 10:46*	*06/21/18 14:42*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			06/14/18 19:09	1
Nitrate as N	**0.056**	**J**	0.11	0.055	mg/L			06/14/18 19:09	1
Chloride	**8.7**		0.50	0.25	mg/L			06/14/18 19:09	1
Fluoride	**1.1**		0.50	0.25	mg/L			06/14/18 19:09	1
Sulfate	**520**		10	5.0	mg/L			06/14/18 19:25	20

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: PZ-4

Lab Sample ID: 440-213600-1

Date Collected: 06/14/18 10:30

Matrix: Water

Date Received: 06/14/18 15:30

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**4.2**		0.50	0.25	mg/L		06/21/18 14:40	06/27/18 17:47	1
Manganese	**0.10**		0.020	0.015	mg/L		06/21/18 14:40	06/23/18 19:27	1
Magnesium	**64**		0.020	0.010	mg/L		06/21/18 14:40	06/23/18 19:27	1
Iron	**0.80**		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:27	1
Sodium	**130**	**B**	0.50	0.26	mg/L		06/21/18 14:40	06/27/18 17:47	1
Calcium	**110**		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:27	1
Boron	**0.19**		0.050	0.025	mg/L		06/21/18 14:40	06/23/18 19:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:57	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			06/21/18 09:12	1
Ammonia (as N)	**2.5**		0.50	0.10	mg/L		06/19/18 04:30	06/19/18 08:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	**1.2**		0.10	0.050	mg/L			06/15/18 08:55	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**320**		4.0	4.0	mg/L			06/15/18 07:24	1
Bicarbonate Alkalinity as CaCO3	**320**		4.0	4.0	mg/L			06/15/18 07:24	1
Carbon Dioxide, Free	**28**		2.0	2.0	mg/L			06/22/18 15:50	1

Client Sample ID: MW-2A

Lab Sample ID: 440-213600-2

Date Collected: 06/14/18 10:35

Matrix: Water

Date Received: 06/14/18 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 16:16	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Acrolein	ND		50	2.5	ug/L			06/20/18 00:15	1
Acrylonitrile	ND		50	1.0	ug/L			06/20/18 00:15	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 16:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 16:16	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 16:16	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 16:16	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 16:16	1
Acetone	ND		20	10	ug/L			06/22/18 16:16	1
Acetonitrile	ND		20	10	ug/L			06/22/18 16:16	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 16:16	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: MW-2A
Date Collected: 06/14/18 10:35
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 16:16	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 16:16	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 16:16	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 16:16	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 16:16	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 16:16	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 16:16	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 16:16	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 16:16	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 16:16	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 16:16	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 16:16	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 16:16	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 16:16	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Propionitrile	ND		20	10	ug/L			06/22/18 16:16	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 16:16	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 16:16	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 16:16	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 16:16	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 16:16	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 16:16	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 16:16	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 16:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 16:16*	*1*
Unknown	*3.0*	*T J*	*ug/L*		*16.36*			*06/22/18 16:16*	*1*
Unknown	*4.0*	*T J*	*ug/L*		*17.59*			*06/22/18 16:16*	*1*

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/20/18 00:15*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/20/18 00:15*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*06/22/18 16:16*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*06/22/18 16:16*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*06/20/18 00:15*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*06/22/18 16:16*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.93	0.23	ug/L		06/20/18 10:46	06/21/18 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	*66*		*30 - 120*	*06/20/18 10:46*	*06/21/18 15:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.33**	**J**	0.50	0.25	mg/L			06/14/18 19:42	1
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 19:42	1
Chloride	**15**		0.50	0.25	mg/L			06/14/18 19:42	1
Fluoride	**1.1**		0.50	0.25	mg/L			06/14/18 19:42	1
Sulfate	**1500**		25	13	mg/L			06/14/18 20:00	50

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.4**		0.50	0.25	mg/L		06/21/18 14:40	06/27/18 17:57	1
Manganese	**0.44**		0.020	0.015	mg/L		06/21/18 14:40	06/23/18 19:40	1
Magnesium	**110**		0.020	0.010	mg/L		06/21/18 14:40	06/23/18 19:40	1
Iron	**9.1**		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:40	1
Sodium	**380**	**B**	0.50	0.26	mg/L		06/21/18 14:40	06/27/18 17:57	1
Calcium	**200**		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:40	1
Boron	**0.55**		0.050	0.025	mg/L		06/21/18 14:40	06/23/18 19:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:57	1
Total Dissolved Solids	**2700**		20	10	mg/L			06/21/18 09:12	1
Ammonia (as N)	**3.2**		0.50	0.10	mg/L		06/19/18 04:30	06/19/18 08:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	**2.8**		0.10	0.050	mg/L			06/15/18 09:07	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**340**		4.0	4.0	mg/L			06/15/18 07:36	1
Bicarbonate Alkalinity as CaCO3	**340**		4.0	4.0	mg/L			06/15/18 07:36	1
Carbon Dioxide, Free	**48**		2.0	2.0	mg/L			06/22/18 15:50	1

Client Sample ID: MW-2B

Lab Sample ID: 440-213600-3

Date Collected: 06/14/18 09:10

Matrix: Water

Date Received: 06/14/18 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 16:43	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Acrolein	ND		50	2.5	ug/L			06/19/18 23:48	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 23:48	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: MW-2B
Date Collected: 06/14/18 09:10
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 16:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 16:43	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 16:43	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 16:43	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 16:43	1
Acetone	ND		20	10	ug/L			06/22/18 16:43	1
Acetonitrile	ND		20	10	ug/L			06/22/18 16:43	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 16:43	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 16:43	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 16:43	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 16:43	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 16:43	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 16:43	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 16:43	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 16:43	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 16:43	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 16:43	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 16:43	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 16:43	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 16:43	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 16:43	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 16:43	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Propionitrile	ND		20	10	ug/L			06/22/18 16:43	1

Client Sample ID: MW-2B
Date Collected: 06/14/18 09:10
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 16:43	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 16:43	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 16:43	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 16:43	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 16:43	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 16:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 16:43	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 16:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4.1*	*T J*	*ug/L*		*3.27*			*06/22/18 16:43*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 16:43*	*1*
Unknown	*5.6*	*T J*	*ug/L*		*16.36*			*06/22/18 16:43*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*17.06*			*06/22/18 16:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/19/18 23:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/19/18 23:48*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 16:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 16:43*	*1*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*06/19/18 23:48*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/22/18 16:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.25	ug/L		06/20/18 10:46	06/21/18 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*76*		*30 - 120*	*06/20/18 10:46*	*06/21/18 15:27*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 20:17	1
Sulfate	**1500**		25	13	mg/L			06/14/18 21:08	50

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.33**	**J**	0.50	0.25	mg/L			06/14/18 20:17	1
Chloride	**14**		0.50	0.25	mg/L			06/14/18 20:17	1
Fluoride	**0.76**		0.50	0.25	mg/L			06/14/18 20:17	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**4.6**		0.50	0.25	mg/L		06/21/18 14:40	06/27/18 18:00	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: MW-2B

Lab Sample ID: 440-213600-3

Date Collected: 06/14/18 09:10

Matrix: Water

Date Received: 06/14/18 15:30

Method: 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.12		0.020	0.015	mg/L		06/21/18 14:40	06/23/18 19:42	1
Magnesium	93		0.020	0.010	mg/L		06/21/18 14:40	06/23/18 19:42	1
Iron	2.0		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:42	1
Sodium	410	B	0.50	0.26	mg/L		06/21/18 14:40	06/27/18 18:00	1
Calcium	170		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:42	1
Boron	0.55		0.050	0.025	mg/L		06/21/18 14:40	06/23/18 19:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:57	1
Total Dissolved Solids	2700		20	10	mg/L			06/21/18 09:12	1
Ammonia (as N)	3.7		0.50	0.10	mg/L		06/21/18 08:00	06/21/18 09:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	1.8		0.10	0.050	mg/L			06/15/18 09:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	340		4.0	4.0	mg/L			06/15/18 07:47	1
Bicarbonate Alkalinity as CaCO3	340		4.0	4.0	mg/L			06/15/18 07:47	1
Carbon Dioxide, Free	19		2.0	2.0	mg/L			06/22/18 15:50	1

Client Sample ID: DW-4

Lab Sample ID: 440-213600-4

Date Collected: 06/14/18 07:58

Matrix: Water

Date Received: 06/14/18 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 17:09	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Acrolein	ND		50	2.5	ug/L			06/19/18 23:20	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 23:20	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 17:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 17:09	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 17:09	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 17:09	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 17:09	1
Acetone	ND		20	10	ug/L			06/22/18 17:09	1
Acetonitrile	ND		20	10	ug/L			06/22/18 17:09	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 17:09	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 17:09	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: DW-4
Date Collected: 06/14/18 07:58
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 17:09	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 17:09	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 17:09	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 17:09	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 17:09	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 17:09	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 17:09	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 17:09	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 17:09	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 17:09	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 17:09	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 17:09	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 17:09	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Propionitrile	ND		20	10	ug/L			06/22/18 17:09	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 17:09	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 17:09	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 17:09	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 17:09	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 17:09	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 17:09	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 17:09	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 17:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 17:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*10*	*T J*	*ug/L*		*7.25*			*06/22/18 17:09*	*1*
Unknown	*3.4*	*T J*	*ug/L*		*14.88*			*06/22/18 17:09*	*1*
Unknown	*3.9*	*T J*	*ug/L*		*15.71*			*06/22/18 17:09*	*1*

Client Sample ID: DW-4
Date Collected: 06/14/18 07:58
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-4
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
2-Ethylacridine	3.7	T J N	ug/L		16.65	1000147-64-9		06/22/18 17:09	1
Unknown	4.1	T J	ug/L		17.49			06/22/18 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		80 - 128		06/19/18 23:20	1
4-Bromofluorobenzene (Surr)	94		80 - 120		06/19/18 23:20	1
Toluene-d8 (Surr)	106		80 - 128		06/22/18 17:09	1
4-Bromofluorobenzene (Surr)	95		80 - 120		06/22/18 17:09	1
Dibromofluoromethane (Surr)	100		76 - 132		06/19/18 23:20	1
Dibromofluoromethane (Surr)	105		76 - 132		06/22/18 17:09	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.94	0.23	ug/L		06/20/18 10:46	06/21/18 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	73		30 - 120	06/20/18 10:46	06/21/18 15:50	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		1.0	0.50	mg/L			06/14/18 22:05	2
Nitrate as N	ND		0.22	0.11	mg/L			06/14/18 22:05	2
Chloride	**13**		1.0	0.50	mg/L			06/14/18 22:05	2
Fluoride	**0.56**	**J**	1.0	0.50	mg/L			06/14/18 22:05	2
Sulfate	**1700**		50	25	mg/L			06/14/18 22:22	100

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.0**		0.50	0.25	mg/L		06/21/18 14:40	06/27/18 18:02	1
Manganese	**0.13**		0.020	0.015	mg/L		06/21/18 14:40	06/23/18 19:45	1
Magnesium	**130**		0.020	0.010	mg/L		06/21/18 14:40	06/23/18 19:45	1
Iron	**1.8**		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:45	1
Sodium	**500**	**B**	0.50	0.26	mg/L		06/21/18 14:40	06/27/18 18:02	1
Calcium	**200**		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:45	1
Boron	**0.64**		0.050	0.025	mg/L		06/21/18 14:40	06/23/18 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**13**	**J**	20	10	mg/L			06/21/18 13:57	1
Total Dissolved Solids	**2900**		20	10	mg/L			06/21/18 09:12	1
Ammonia (as N)	**4.5**		0.50	0.10	mg/L		06/21/18 08:00	06/21/18 09:00	1
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:40	1
Total Organic Carbon	**1.8**		0.10	0.050	mg/L			06/15/18 09:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**340**		4.0	4.0	mg/L			06/15/18 07:56	1
Bicarbonate Alkalinity as CaCO3	**340**		4.0	4.0	mg/L			06/15/18 07:56	1
Carbon Dioxide, Free	**18**		2.0	2.0	mg/L			06/22/18 15:50	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: QCAB
Date Collected: 06/14/18 00:01
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 17:36	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Acrolein	ND		50	2.5	ug/L			06/19/18 22:53	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 22:53	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 17:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 17:36	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 17:36	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 17:36	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 17:36	1
Acetone	ND		20	10	ug/L			06/22/18 17:36	1
Acetonitrile	ND		20	10	ug/L			06/22/18 17:36	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 17:36	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 17:36	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 17:36	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 17:36	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 17:36	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 17:36	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 17:36	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 17:36	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 17:36	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 17:36	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 17:36	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 17:36	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 17:36	1

Client Sample ID: QCAB
Date Collected: 06/14/18 00:01
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 17:36	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 17:36	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Propionitrile	ND		20	10	ug/L			06/22/18 17:36	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 17:36	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 17:36	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 17:36	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 17:36	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 17:36	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 17:36	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 17:36	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 17:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 17:36*	*1*
Unknown	*17*	*T J*	*ug/L*		*16.20*			*06/22/18 17:36*	*1*
Unknown	*3.4*	*T J*	*ug/L*		*17.40*			*06/22/18 17:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 128*		*06/19/18 22:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/19/18 22:53*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 17:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 17:36*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/19/18 22:53*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/22/18 17:36*	*1*

Client Sample ID: QCTB
Date Collected: 06/14/18 00:01
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 18:02	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Acrolein	ND		50	2.5	ug/L			06/19/18 22:25	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 22:25	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 18:02	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: QCTB
Date Collected: 06/14/18 00:01
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 18:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 18:02	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 18:02	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 18:02	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 18:02	1
Acetone	ND		20	10	ug/L			06/22/18 18:02	1
Acetonitrile	ND		20	10	ug/L			06/22/18 18:02	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 18:02	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 18:02	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 18:02	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 18:02	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 18:02	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 18:02	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 18:02	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 18:02	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 18:02	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 18:02	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 18:02	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 18:02	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 18:02	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 18:02	1
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 18:02	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Propionitrile	ND		20	10	ug/L			06/22/18 18:02	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 18:02	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 18:02	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 18:02	1

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: QCTB
Date Collected: 06/14/18 00:01
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 18:02	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 18:02	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 18:02	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 18:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 18:02	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 18:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 18:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*T J*	*ug/L*		*7.25*			*06/22/18 18:02*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*15.14*			*06/22/18 18:02*	*1*
Unknown	*9.9*	*T J*	*ug/L*		*16.57*			*06/22/18 18:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/19/18 22:25*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/19/18 22:25*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*06/22/18 18:02*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/22/18 18:02*	*1*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*06/19/18 22:25*	*1*
Dibromofluoromethane (Surr)	*108*		*76 - 132*		*06/22/18 18:02*	*1*

Method Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
410.4	COD	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CO2 C	Free Carbon Dioxide	SM	TAL IRV
SM 4500 NH3 D	Ammonia	SM	TAL IRV
SM 4500 S2 D	Sulfide, Total	SM	TAL IRV
SM 5310C	TOC	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL IRV
SM 4500 NH3 B	Distillation, Ammonia	SM	TAL IRV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

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

Client Sample ID: PZ-4

Lab Sample ID: 440-213600-1

Date Collected: 06/14/18 10:30

Matrix: Water

Date Received: 06/14/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 15:50	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/20/18 00:43	WK	TAL IRV
Total/NA	Prep	3520C			1070 mL	1.0 mL	483148	06/20/18 10:46	AP	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 14:42	ANW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	482112	06/14/18 19:09	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	482113	06/14/18 19:09	NTN	TAL IRV
Total/NA	Analysis	300.0		20			482113	06/14/18 19:25	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484019	06/23/18 19:27	TJW	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484640	06/27/18 17:47	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:57	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482326	06/15/18 07:24	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	483384	06/21/18 09:12	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483763	06/22/18 15:50	XL	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	482836	06/19/18 04:30	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			482861	06/19/18 08:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482361	06/15/18 08:55	YZ	TAL IRV

Client Sample ID: MW-2A

Lab Sample ID: 440-213600-2

Date Collected: 06/14/18 10:35

Matrix: Water

Date Received: 06/14/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 16:16	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/20/18 00:15	WK	TAL IRV
Total/NA	Prep	3520C			1070 mL	1.0 mL	483148	06/20/18 10:46	AP	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 15:05	ANW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	482112	06/14/18 19:42	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	482113	06/14/18 19:42	NTN	TAL IRV
Total/NA	Analysis	300.0		50			482113	06/14/18 20:00	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484019	06/23/18 19:40	TJW	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484640	06/27/18 17:57	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:57	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482326	06/15/18 07:36	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	483384	06/21/18 09:12	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483763	06/22/18 15:50	XL	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	482836	06/19/18 04:30	YZ	TAL IRV

Client Sample ID: MW-2A

Date Collected: 06/14/18 10:35
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 NH3 D		1			482861	06/19/18 08:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482361	06/15/18 09:07	YZ	TAL IRV

Client Sample ID: MW-2B

Date Collected: 06/14/18 09:10
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 16:43	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 23:48	WK	TAL IRV
Total/NA	Prep	3520C			1005 mL	1.0 mL	483148	06/20/18 10:46	AP	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 15:27	ANW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	482112	06/14/18 20:17	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	1	5 mL	1.0 mL	482113	06/14/18 20:17	NTN	TAL IRV
Total/NA	Analysis	300.0		50			482113	06/14/18 21:08	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484019	06/23/18 19:42	TJW	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484640	06/27/18 18:00	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:57	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482326	06/15/18 07:47	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	483384	06/21/18 09:12	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483763	06/22/18 15:50	XL	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	483365	06/21/18 08:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			483397	06/21/18 09:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482361	06/15/18 09:19	YZ	TAL IRV

Client Sample ID: DW-4

Date Collected: 06/14/18 07:58
Date Received: 06/14/18 15:30

Lab Sample ID: 440-213600-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 17:09	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 23:20	WK	TAL IRV
Total/NA	Prep	3520C			1065 mL	1.0 mL	483148	06/20/18 10:46	AP	TAL IRV
Total/NA	Analysis	8270C		1			483345	06/21/18 15:50	ANW	TAL IRV
Total/NA	Analysis	300.0		2			482112	06/14/18 22:05	NTN	TAL IRV
Total/NA	Analysis	300.0		2			482113	06/14/18 22:05	NTN	TAL IRV
Total/NA	Analysis	300.0		100			482113	06/14/18 22:22	NTN	TAL IRV

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Client Sample ID: DW-4

Lab Sample ID: 440-213600-4

Date Collected: 06/14/18 07:58
Matrix: Water
Date Received: 06/14/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484019	06/23/18 19:45	TJW	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	483476	06/21/18 14:40	JL	TAL IRV
Total Recoverable	Analysis	6010B		1			484640	06/27/18 18:02	P1R	TAL IRV
Total/NA	Analysis	410.4		1	2.5 mL	2.5 mL	483463	06/21/18 13:57	KYP	TAL IRV
Total/NA	Analysis	SM 2320B		1			482326	06/15/18 07:56	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	483384	06/21/18 09:12	XL	TAL IRV
Total/NA	Analysis	SM 4500 CO2 C		1	25 mL	25 mL	483763	06/22/18 15:50	XL	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	483365	06/21/18 08:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1			483397	06/21/18 09:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 S2 D		1	7.5 mL	7.5 mL	482933	06/19/18 12:40	KMY	TAL IRV
Total/NA	Analysis	SM 5310C		1	100 mL	100 mL	482361	06/15/18 09:57	YZ	TAL IRV

Client Sample ID: QCAB

Lab Sample ID: 440-213600-5

Date Collected: 06/14/18 00:01
Matrix: Water
Date Received: 06/14/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 17:36	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 22:53	WK	TAL IRV

Client Sample ID: QCTB

Lab Sample ID: 440-213600-6

Date Collected: 06/14/18 00:01
Matrix: Water
Date Received: 06/14/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	483613	06/22/18 18:02	RM	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	482990	06/19/18 22:25	WK	TAL IRV

Laboratory References:

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

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

Lab Sample ID: MB 440-482990/4
Matrix: Water
Analysis Batch: 482990

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		50	2.5	ug/L			06/19/18 17:50	1
Acrylonitrile	ND		50	1.0	ug/L			06/19/18 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/19/18 17:50*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/19/18 17:50*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*06/19/18 17:50*	*1*

Lab Sample ID: LCS 440-482990/5
Matrix: Water
Analysis Batch: 482990

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acrolein			25.0	23.3	J	ug/L		93	10 - 145		
Acrylonitrile			250	313		ug/L		125	48 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 128*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*76 - 132*

Lab Sample ID: 440-213518-D-4 MS
Matrix: Water
Analysis Batch: 482990

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acrolein	ND		25.0	18.3	J	ug/L		73	10 - 147		
Acrylonitrile	ND		250	279		ug/L		112	38 - 144		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 128*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*

Lab Sample ID: 440-213518-D-4 MSD
Matrix: Water
Analysis Batch: 482990

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acrolein	ND		25.0	19.0	J	ug/L		76	10 - 147	4	40
Acrylonitrile	ND		250	291		ug/L		116	38 - 144	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 128*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*76 - 132*

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

Lab Sample ID: MB 440-483613/4
Matrix: Water
Analysis Batch: 483613

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			06/22/18 08:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/22/18 08:57	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
2-Chloro-1,3-butadiene	ND		1.0	0.50	ug/L			06/22/18 08:57	1
2-Hexanone	ND		5.0	2.5	ug/L			06/22/18 08:57	1
Acetone	ND		20	10	ug/L			06/22/18 08:57	1
Acetonitrile	ND		20	10	ug/L			06/22/18 08:57	1
Acrolein	ND		5.0	2.5	ug/L			06/22/18 08:57	1
Acrylonitrile	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Benzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Allyl chloride	ND		1.0	0.50	ug/L			06/22/18 08:57	1
Bromoform	ND		1.0	0.40	ug/L			06/22/18 08:57	1
Bromomethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			06/22/18 08:57	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Chlorobenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Bromochloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Chloroethane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
Chloroform	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Chloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Dibromochloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Dibromomethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Bromodichloromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			06/22/18 08:57	1
Ethyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Ethylbenzene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Iodomethane	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Isobutyl alcohol	ND		25	13	ug/L			06/22/18 08:57	1
m,p-Xylene	ND		1.0	0.50	ug/L			06/22/18 08:57	1
Methylacrylonitrile	ND		10	2.5	ug/L			06/22/18 08:57	1
Methyl methacrylate	ND		2.0	1.0	ug/L			06/22/18 08:57	1
Methylene Chloride	ND		2.0	0.88	ug/L			06/22/18 08:57	1

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

Lab Sample ID: MB 440-483613/4
Matrix: Water
Analysis Batch: 483613

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Naphthalene	ND		1.0	0.40	ug/L			06/22/18 08:57	1
o-Xylene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Propionitrile	ND		20	10	ug/L			06/22/18 08:57	1
Styrene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
t-Butanol	ND		10	5.0	ug/L			06/22/18 08:57	1
Tetrachloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Tetrahydrofuran	ND		10	5.0	ug/L			06/22/18 08:57	1
Toluene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			06/22/18 08:57	1
Trichloroethene	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			06/22/18 08:57	1
Vinyl acetate	ND		4.0	2.0	ug/L			06/22/18 08:57	1
Vinyl chloride	ND		0.50	0.25	ug/L			06/22/18 08:57	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			06/22/18 08:57	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			06/22/18 08:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			06/22/18 08:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5.28*	*T J*	*ug/L*		*15.72*			*06/22/18 08:57*	*1*
Unknown	*10.8*	*T J*	*ug/L*		*17.47*			*06/22/18 08:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/22/18 08:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*06/22/18 08:57*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*06/22/18 08:57*	*1*

Lab Sample ID: LCS 440-483613/5
Matrix: Water
Analysis Batch: 483613

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	25.3		ug/L		101	63 - 130
1,1,1,2-Tetrachloroethane	25.0	26.5		ug/L		106	60 - 141
1,1,1-Trichloroethane	25.0	26.4		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	63 - 130
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130
1,1-Dichloroethane	25.0	25.6		ug/L		102	64 - 130
1,1-Dichloroethene	25.0	25.1		ug/L		100	70 - 130
1,1-Dichloropropene	25.0	25.6		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	25.0	28.3		ug/L		113	60 - 140
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	52 - 140
1,2-Dichlorobenzene	25.0	27.3		ug/L		109	70 - 130
1,2-Dichloroethane	25.0	26.4		ug/L		106	57 - 138
1,2-Dichloropropane	25.0	25.2		ug/L		101	67 - 130

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

Lab Sample ID: LCS 440-483613/5
Matrix: Water
Analysis Batch: 483613

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	26.6		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	24.3		ug/L		97	70 - 130
1,4-Dichlorobenzene	25.0	26.6		ug/L		107	70 - 130
2,2-Dichloropropane	25.0	27.0		ug/L		108	68 - 141
2-Hexanone	25.0	26.6		ug/L		106	10 - 150
Acetone	25.0	26.0		ug/L		104	10 - 150
Acetonitrile	250	245		ug/L		98	49 - 142
Acrolein	25.0	14.5		ug/L		58	10 - 145
Benzene	25.0	25.7		ug/L		103	68 - 130
Bromoform	25.0	27.7		ug/L		111	60 - 148
Bromomethane	25.0	24.4		ug/L		97	64 - 139
Carbon disulfide	25.0	24.8		ug/L		99	52 - 136
Carbon tetrachloride	25.0	27.2		ug/L		109	60 - 150
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Bromochloromethane	25.0	26.7		ug/L		107	70 - 130
Chloroethane	25.0	23.8		ug/L		95	64 - 135
Chloroform	25.0	26.1		ug/L		104	70 - 130
Chloromethane	25.0	23.9		ug/L		96	47 - 140
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	70 - 133
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 133
Dibromochloromethane	25.0	26.8		ug/L		107	69 - 145
Dibromomethane	25.0	25.7		ug/L		103	70 - 130
Bromodichloromethane	25.0	25.9		ug/L		103	70 - 132
Dichlorodifluoromethane	25.0	21.1		ug/L		84	29 - 150
Ethylbenzene	25.0	26.3		ug/L		105	70 - 130
m,p-Xylene	25.0	25.5		ug/L		102	70 - 130
Methylene Chloride	25.0	23.0		ug/L		92	52 - 130
Methyl tert-butyl ether	25.0	25.3		ug/L		101	63 - 131
Naphthalene	25.0	27.1		ug/L		109	60 - 140
o-Xylene	25.0	25.5		ug/L		102	70 - 130
Styrene	25.0	25.7		ug/L		103	70 - 134
t-Butanol	250	275		ug/L		110	70 - 130
Tetrachloroethene	25.0	26.8		ug/L		107	70 - 130
Toluene	25.0	26.3		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	70 - 132
Trichloroethene	25.0	26.1		ug/L		104	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	60 - 150
Vinyl acetate	25.0	25.0		ug/L		100	48 - 140
Vinyl chloride	25.0	21.8		ug/L		87	59 - 133
1,2-Dibromoethane (EDB)	25.0	25.4		ug/L		102	70 - 130
2-Butanone (MEK)	25.0	22.7		ug/L		91	44 - 150
4-Methyl-2-pentanone (MIBK)	25.0	25.7		ug/L		103	59 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 128*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*76 - 132*

Lab Sample ID: 440-213518-A-1 MS
Matrix: Water
Analysis Batch: 483613

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	ND		25.0	25.2		ug/L		101	60 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	26.3		ug/L		105	60 - 149
1,1,1-Trichloroethane	ND		25.0	26.2		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	23.3		ug/L		93	63 - 130
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	70 - 130
1,1-Dichloroethane	ND		25.0	24.8		ug/L		99	65 - 130
1,1-Dichloroethene	ND		25.0	24.1		ug/L		96	70 - 130
1,1-Dichloropropene	ND		25.0	25.2		ug/L		101	64 - 130
1,2,4-Trichlorobenzene	ND		25.0	28.1		ug/L		112	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	23.6		ug/L		95	48 - 140
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	70 - 130
1,2-Dichloroethane	ND		25.0	26.0		ug/L		104	56 - 146
1,2-Dichloropropane	ND		25.0	24.4		ug/L		98	69 - 130
1,3-Dichlorobenzene	ND		25.0	25.2		ug/L		101	70 - 130
1,3-Dichloropropane	ND		25.0	24.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	ND		25.0	25.3		ug/L		101	70 - 130
2,2-Dichloropropane	ND		25.0	26.0		ug/L		104	69 - 138
2-Hexanone	ND		25.0	26.9		ug/L		108	10 - 150
Acetone	ND		25.0	24.7		ug/L		99	10 - 150
Acetonitrile	ND		250	256		ug/L		102	37 - 140
Acrolein	ND		25.0	15.1		ug/L		60	10 - 147
Benzene	ND		25.0	25.2		ug/L		101	66 - 130
Bromoform	ND		25.0	27.7		ug/L		111	59 - 150
Bromomethane	ND		25.0	23.8		ug/L		95	62 - 131
Carbon disulfide	ND		25.0	23.3		ug/L		93	49 - 140
Carbon tetrachloride	ND		25.0	26.4		ug/L		106	60 - 150
Chlorobenzene	ND		25.0	25.6		ug/L		102	70 - 130
Bromochloromethane	ND		25.0	26.3		ug/L		105	70 - 130
Chloroethane	ND		25.0	23.2		ug/L		93	68 - 130
Chloroform	ND		25.0	25.9		ug/L		103	70 - 130
Chloromethane	ND		25.0	22.7		ug/L		91	39 - 144
cis-1,2-Dichloroethene	ND		25.0	25.5		ug/L		102	70 - 130
cis-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	70 - 133
Dibromochloromethane	ND		25.0	26.0		ug/L		104	70 - 148
Dibromomethane	ND		25.0	25.2		ug/L		101	70 - 130
Bromodichloromethane	ND		25.0	25.9		ug/L		104	70 - 138
Dichlorodifluoromethane	ND		25.0	20.6		ug/L		82	25 - 142
Ethylbenzene	ND		25.0	25.6		ug/L		102	70 - 130
m,p-Xylene	ND		25.0	24.6		ug/L		98	70 - 133
Methylene Chloride	ND		25.0	22.8		ug/L		91	52 - 130
Methyl tert-butyl ether	ND		25.0	25.9		ug/L		104	70 - 130
Naphthalene	ND		25.0	26.6		ug/L		106	60 - 140
o-Xylene	ND		25.0	24.7		ug/L		99	70 - 133
Styrene	ND		25.0	25.6		ug/L		102	29 - 150
t-Butanol	ND		250	266		ug/L		106	70 - 130
Tetrachloroethene	ND		25.0	26.0		ug/L		104	70 - 137
Toluene	ND		25.0	25.9		ug/L		104	70 - 130
trans-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	70 - 130
trans-1,3-Dichloropropene	ND		25.0	25.4		ug/L		102	70 - 138
Trichloroethene	ND		25.0	25.2		ug/L		101	70 - 130

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

Lab Sample ID: 440-213518-A-1 MS
Matrix: Water
Analysis Batch: 483613

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	ND		25.0	24.7		ug/L		99	60 - 150
Vinyl acetate	ND		25.0	24.8		ug/L		99	23 - 150
Vinyl chloride	ND		25.0	21.3		ug/L		85	50 - 137
1,2-Dibromoethane (EDB)	ND		25.0	25.9		ug/L		104	70 - 131
2-Butanone (MEK)	ND		25.0	24.1		ug/L		97	48 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.7		ug/L		107	52 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 128*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*

Lab Sample ID: 440-213518-A-1 MSD
Matrix: Water
Analysis Batch: 483613

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	60 - 130	8	30
1,1,1,2-Tetrachloroethane	ND		25.0	26.1		ug/L		105	60 - 149	1	20
1,1,1-Trichloroethane	ND		25.0	25.8		ug/L		103	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.9		ug/L		88	63 - 130	6	30
1,1,2-Trichloroethane	ND		25.0	24.6		ug/L		98	70 - 130	1	25
1,1-Dichloroethane	ND		25.0	24.7		ug/L		99	65 - 130	1	20
1,1-Dichloroethene	ND		25.0	23.9		ug/L		96	70 - 130	0	20
1,1-Dichloropropene	ND		25.0	25.1		ug/L		101	64 - 130	0	20
1,2,4-Trichlorobenzene	ND		25.0	27.1		ug/L		108	60 - 140	4	20
1,2-Dibromo-3-Chloropropane	ND		25.0	21.6		ug/L		86	48 - 140	9	30
1,2-Dichlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	ND		25.0	25.2		ug/L		101	56 - 146	3	20
1,2-Dichloropropane	ND		25.0	24.6		ug/L		98	69 - 130	0	20
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	70 - 130	2	20
1,3-Dichloropropane	ND		25.0	23.7		ug/L		95	70 - 130	3	25
1,4-Dichlorobenzene	ND		25.0	24.6		ug/L		99	70 - 130	3	20
2,2-Dichloropropane	ND		25.0	26.0		ug/L		104	69 - 138	0	25
2-Hexanone	ND		25.0	25.4		ug/L		102	10 - 150	6	35
Acetone	ND		25.0	23.4		ug/L		94	10 - 150	5	35
Acetonitrile	ND		250	235		ug/L		94	37 - 140	8	40
Acrolein	ND		25.0	14.6		ug/L		59	10 - 147	3	40
Benzene	ND		25.0	25.0		ug/L		100	66 - 130	1	20
Bromoform	ND		25.0	26.6		ug/L		106	59 - 150	4	25
Bromomethane	ND		25.0	23.2		ug/L		93	62 - 131	3	25
Carbon disulfide	ND		25.0	23.4		ug/L		94	49 - 140	0	20
Carbon tetrachloride	ND		25.0	26.1		ug/L		104	60 - 150	1	25
Chlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130	2	20
Bromochloromethane	ND		25.0	25.9		ug/L		104	70 - 130	2	25
Chloroethane	ND		25.0	22.8		ug/L		91	68 - 130	2	25
Chloroform	ND		25.0	25.0		ug/L		100	70 - 130	3	20
Chloromethane	ND		25.0	22.0		ug/L		88	39 - 144	3	25

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

Lab Sample ID: 440-213518-A-1 MSD
Matrix: Water
Analysis Batch: 483613

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	ND		25.0	25.4		ug/L		102	70 - 130	0	20
cis-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	70 - 133	2	20
Dibromochloromethane	ND		25.0	25.8		ug/L		103	70 - 148	1	25
Dibromomethane	ND		25.0	24.3		ug/L		97	70 - 130	4	25
Bromodichloromethane	ND		25.0	25.4		ug/L		102	70 - 138	2	20
Dichlorodifluoromethane	ND		25.0	21.1		ug/L		84	25 - 142	2	30
Ethylbenzene	ND		25.0	25.4		ug/L		102	70 - 130	1	20
m,p-Xylene	ND		25.0	24.4		ug/L		98	70 - 133	1	25
Methylene Chloride	ND		25.0	22.3		ug/L		89	52 - 130	2	20
Methyl tert-butyl ether	ND		25.0	25.3		ug/L		101	70 - 130	3	25
Naphthalene	ND		25.0	25.1		ug/L		100	60 - 140	6	30
o-Xylene	ND		25.0	24.0		ug/L		96	70 - 133	3	20
Styrene	ND		25.0	25.0		ug/L		100	29 - 150	2	35
t-Butanol	ND		250	256		ug/L		102	70 - 130	4	25
Tetrachloroethene	ND		25.0	25.8		ug/L		103	70 - 137	1	20
Toluene	ND		25.0	25.8		ug/L		103	70 - 130	1	20
trans-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	70 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	25.1		ug/L		101	70 - 138	1	25
Trichloroethene	ND		25.0	25.4		ug/L		102	70 - 130	1	20
Trichlorofluoromethane	ND		25.0	24.5		ug/L		98	60 - 150	1	25
Vinyl acetate	ND		25.0	24.8		ug/L		99	23 - 150	0	30
Vinyl chloride	ND		25.0	20.9		ug/L		84	50 - 137	2	30
1,2-Dibromoethane (EDB)	ND		25.0	24.8		ug/L		99	70 - 131	4	25
2-Butanone (MEK)	ND		25.0	22.4		ug/L		90	48 - 140	7	40
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.6		ug/L		98	52 - 150	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 128*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-483148/1-A
Matrix: Water
Analysis Batch: 483345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.26	ug/L		06/20/18 10:46	06/21/18 13:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*72*		*30 - 120*	*06/20/18 10:46*	*06/21/18 13:34*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-483148/2-A
Matrix: Water
Analysis Batch: 483345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483148

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.04	1.43		ug/L		70	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*68*		*30 - 120*

Lab Sample ID: LCSD 440-483148/3-A
Matrix: Water
Analysis Batch: 483345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 483148

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.04	1.52		ug/L		75	35 - 120	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*70*		*30 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-482112/6
Matrix: Water
Analysis Batch: 482112

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			06/14/18 11:55	1

Lab Sample ID: LCS 440-482112/5
Matrix: Water
Analysis Batch: 482112

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.13	1.11		mg/L		98	90 - 110		

Lab Sample ID: 440-213600-3 MS
Matrix: Water
Analysis Batch: 482112

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	ND		1.13	1.08		mg/L		95	80 - 120		

Lab Sample ID: 440-213600-3 MSD
Matrix: Water
Analysis Batch: 482112

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		1.13	1.09		mg/L		96	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 440-482113/6
Matrix: Water
Analysis Batch: 482113

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			06/14/18 11:55	1
Chloride	ND		0.50	0.25	mg/L			06/14/18 11:55	1
Fluoride	ND		0.50	0.25	mg/L			06/14/18 11:55	1
Sulfate	ND		0.50	0.25	mg/L			06/14/18 11:55	1

Lab Sample ID: LCS 440-482113/5
Matrix: Water
Analysis Batch: 482113

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	5.00	4.77		mg/L		95	90 - 110
Chloride	5.00	4.69		mg/L		94	90 - 110
Fluoride	5.00	4.71		mg/L		94	90 - 110
Sulfate	5.00	5.00		mg/L		100	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-213600-3 MS
Matrix: Water
Analysis Batch: 482113

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide - DL	0.33	J	5.00	4.85		mg/L		90	80 - 120
Chloride - DL	14		5.00	19.4		mg/L		101	80 - 120
Fluoride - DL	0.76		5.00	5.74		mg/L		99	80 - 120
Sulfate - DL	2200	E	5.00	2200	E 4	mg/L		-89	80 - 120

Lab Sample ID: 440-213600-3 MSD
Matrix: Water
Analysis Batch: 482113

Client Sample ID: MW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide - DL	0.33	J	5.00	4.84		mg/L		90	80 - 120	0	20
Chloride - DL	14		5.00	19.5		mg/L		103	80 - 120	0	20
Fluoride - DL	0.76		5.00	5.77		mg/L		100	80 - 120	1	20
Sulfate - DL	2200	E	5.00	2200	E 4	mg/L		-55	80 - 120	0	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-483476/1-A
Matrix: Water
Analysis Batch: 484019

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.020	0.015	mg/L		06/21/18 14:40	06/23/18 19:22	1
Magnesium	ND		0.020	0.010	mg/L		06/21/18 14:40	06/23/18 19:22	1
Iron	ND		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:22	1
Calcium	ND		0.10	0.050	mg/L		06/21/18 14:40	06/23/18 19:22	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 440-483476/1-A
Matrix: Water
Analysis Batch: 484019

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050	0.025	mg/L		06/21/18 14:40	06/23/18 19:22	1

Lab Sample ID: MB 440-483476/1-A
Matrix: Water
Analysis Batch: 484640

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		0.50	0.25	mg/L		06/21/18 14:40	06/27/18 17:42	1
Sodium	0.321	J	0.50	0.26	mg/L		06/21/18 14:40	06/27/18 17:42	1

Lab Sample ID: LCS 440-483476/2-A
Matrix: Water
Analysis Batch: 484019

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1.00	0.963		mg/L		96	80 - 120
Magnesium	5.00	4.45		mg/L		89	80 - 120
Iron	1.00	0.988		mg/L		99	80 - 120
Calcium	5.00	4.87		mg/L		97	80 - 120
Boron	1.00	0.965		mg/L		96	80 - 120

Lab Sample ID: LCS 440-483476/2-A
Matrix: Water
Analysis Batch: 484640

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10.0	10.2		mg/L		102	80 - 120
Sodium	10.0	10.5		mg/L		105	80 - 120

Lab Sample ID: 440-213600-1 MS
Matrix: Water
Analysis Batch: 484019

Client Sample ID: PZ-4
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.10		1.00	1.01		mg/L		91	75 - 125
Magnesium	64		5.00	66.3	4	mg/L		43	75 - 125
Iron	0.80		1.00	1.65		mg/L		85	75 - 125
Calcium	110		5.00	116	4	mg/L		40	75 - 125
Boron	0.19		1.00	1.15		mg/L		96	75 - 125

Lab Sample ID: 440-213600-1 MS
Matrix: Water
Analysis Batch: 484640

Client Sample ID: PZ-4
Prep Type: Total Recoverable
Prep Batch: 483476

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	4.2		10.0	14.6		mg/L		103	75 - 125
Sodium	130	B	10.0	135	4	mg/L		85	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-213600-1 MSD — **Client Sample ID: PZ-4**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 484019 — **Prep Batch: 483476**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	0.10		1.00	1.06		mg/L		96	75 - 125	5	20
Magnesium	64		5.00	68.9	4	mg/L		95	75 - 125	4	20
Iron	0.80		1.00	1.73		mg/L		93	75 - 125	4	20
Calcium	110		5.00	120	4	mg/L		130	75 - 125	4	20
Boron	0.19		1.00	1.20		mg/L		101	75 - 125	5	20

Lab Sample ID: 440-213600-1 MSD — **Client Sample ID: PZ-4**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 484640 — **Prep Batch: 483476**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	4.2		10.0	15.5		mg/L		113	75 - 125	6	20
Sodium	130	B	10.0	142	4	mg/L		156	75 - 125	5	20

Method: 410.4 - COD

Lab Sample ID: MB 440-483463/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			06/21/18 13:55	1

Lab Sample ID: LCS 440-483463/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	199		mg/L		99	90 - 110

Lab Sample ID: 440-213600-1 MS — **Client Sample ID: PZ-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		200	211		mg/L		106	70 - 120

Lab Sample ID: 440-213600-1 MSD — **Client Sample ID: PZ-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		200	192		mg/L		96	70 - 120	9	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-482326/3
Matrix: Water
Analysis Batch: 482326

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/15/18 04:54	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/15/18 04:54	1

Lab Sample ID: LCS 440-482326/2
Matrix: Water
Analysis Batch: 482326

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	98.9	97.2		mg/L		98	80 - 120

Lab Sample ID: 440-213571-A-4 DU
Matrix: Water
Analysis Batch: 482326

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity as CaCO3	88		93.0		mg/L		6	20
Bicarbonate Alkalinity as CaCO3	88		93.0		mg/L		6	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-483384/1
Matrix: Water
Analysis Batch: 483384

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			06/21/18 09:12	1

Lab Sample ID: LCS 440-483384/2
Matrix: Water
Analysis Batch: 483384

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	968		mg/L		97	90 - 110

Lab Sample ID: 440-213600-1 DU
Matrix: Water
Analysis Batch: 483384

Client Sample ID: PZ-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1150		mg/L		2	5

Method: SM 4500 CO2 C - Free Carbon Dioxide

Lab Sample ID: MB 440-483763/1
Matrix: Water
Analysis Batch: 483763

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free	ND		2.0	2.0	mg/L			06/22/18 15:50	1

Lab Sample ID: 440-213600-1 DU — **Client Sample ID: PZ-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483763

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon Dioxide, Free	28		28.2		mg/L		0	20

Lab Sample ID: 440-213600-2 DU — **Client Sample ID: MW-2A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483763

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon Dioxide, Free	48		45.8		mg/L		4	20

Lab Sample ID: 440-213600-3 DU — **Client Sample ID: MW-2B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483763

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon Dioxide, Free	19		19.4		mg/L		0	20

Lab Sample ID: 440-213600-4 DU — **Client Sample ID: DW-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483763

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon Dioxide, Free	18		19.4		mg/L		10	20

Method: SM 4500 NH3 D - Ammonia

Lab Sample ID: MB 440-482836/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482861 — **Prep Batch: 482836**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.50	0.10	mg/L		06/19/18 04:30	06/19/18 08:00	1

Lab Sample ID: LCS 440-482836/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482861 — **Prep Batch: 482836**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	2.50	2.25		mg/L		90	85 - 115

Lab Sample ID: 440-213806-A-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482861 — **Prep Batch: 482836**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	ND		2.50	2.51		mg/L		100	75 - 125

Lab Sample ID: 440-213806-A-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482861 — **Prep Batch: 482836**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	ND		2.50	2.42		mg/L		97	75 - 125	4	15

Lab Sample ID: MB 440-483365/2-A
Matrix: Water
Analysis Batch: 483397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.50	0.10	mg/L		06/21/18 08:00	06/21/18 09:00	1

Lab Sample ID: LCS 440-483365/1-A
Matrix: Water
Analysis Batch: 483397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	2.50	2.40		mg/L		96	85 - 115

Lab Sample ID: 440-214043-A-1-B MS
Matrix: Water
Analysis Batch: 483397

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 483365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.35	J	2.50	2.78		mg/L		97	75 - 125

Lab Sample ID: 440-214043-A-1-C MSD
Matrix: Water
Analysis Batch: 483397

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 483365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	0.35	J	2.50	2.78		mg/L		97	75 - 125	0	15

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 440-482933/3
Matrix: Water
Analysis Batch: 482933

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Sulfide	ND		0.050	0.027	mg/L			06/19/18 12:38	1

Lab Sample ID: LCS 440-482933/4
Matrix: Water
Analysis Batch: 482933

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Sulfide	0.460	0.451		mg/L		98	80 - 120

Lab Sample ID: LCSD 440-482933/5
Matrix: Water
Analysis Batch: 482933

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Sulfide	0.460	0.455		mg/L		99	80 - 120	1	20

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: 550-104381-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482933

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Sulfide	ND		0.460	0.442		mg/L		96	70 - 130

Lab Sample ID: 550-104381-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482933

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Sulfide	ND		0.460	0.395		mg/L		86	70 - 130	11	30

Method: SM 5310C - TOC

Lab Sample ID: MB 440-482361/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		0.10	0.050	mg/L			06/15/18 07:51	1

Lab Sample ID: LCS 440-482361/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.8		mg/L		108	90 - 110

Lab Sample ID: MRL 440-482361/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482361

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	0.100	0.126		mg/L		126	50 - 150

Lab Sample ID: 440-213518-H-3 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482361

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	0.34		10.0	10.8		mg/L		105	80 - 120

Lab Sample ID: 440-213518-H-3 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482361

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	0.34		10.0	10.5		mg/L		102	80 - 120	3	20

GC/MS VOA

Analysis Batch: 482990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	8260B	
440-213600-2	MW-2A	Total/NA	Water	8260B	
440-213600-3	MW-2B	Total/NA	Water	8260B	
440-213600-4	DW-4	Total/NA	Water	8260B	
440-213600-5	QCAB	Total/NA	Water	8260B	
440-213600-6	QCTB	Total/NA	Water	8260B	
MB 440-482990/4	Method Blank	Total/NA	Water	8260B	
LCS 440-482990/5	Lab Control Sample	Total/NA	Water	8260B	
440-213518-D-4 MS	Matrix Spike	Total/NA	Water	8260B	
440-213518-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 483613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	8260B	
440-213600-2	MW-2A	Total/NA	Water	8260B	
440-213600-3	MW-2B	Total/NA	Water	8260B	
440-213600-4	DW-4	Total/NA	Water	8260B	
440-213600-5	QCAB	Total/NA	Water	8260B	
440-213600-6	QCTB	Total/NA	Water	8260B	
MB 440-483613/4	Method Blank	Total/NA	Water	8260B	
LCS 440-483613/5	Lab Control Sample	Total/NA	Water	8260B	
440-213518-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-213518-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 483148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	3520C	
440-213600-2	MW-2A	Total/NA	Water	3520C	
440-213600-3	MW-2B	Total/NA	Water	3520C	
440-213600-4	DW-4	Total/NA	Water	3520C	
MB 440-483148/1-A	Method Blank	Total/NA	Water	3520C	
LCS 440-483148/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-483148/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 483345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	8270C	483148
440-213600-2	MW-2A	Total/NA	Water	8270C	483148
440-213600-3	MW-2B	Total/NA	Water	8270C	483148
440-213600-4	DW-4	Total/NA	Water	8270C	483148
MB 440-483148/1-A	Method Blank	Total/NA	Water	8270C	483148
LCS 440-483148/2-A	Lab Control Sample	Total/NA	Water	8270C	483148
LCSD 440-483148/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	483148

HPLC/IC

Analysis Batch: 482112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	300.0	
440-213600-2	MW-2A	Total/NA	Water	300.0	
440-213600-3	MW-2B	Total/NA	Water	300.0	
440-213600-4	DW-4	Total/NA	Water	300.0	
MB 440-482112/6	Method Blank	Total/NA	Water	300.0	
LCS 440-482112/5	Lab Control Sample	Total/NA	Water	300.0	
440-213600-3 MS	MW-2B	Total/NA	Water	300.0	
440-213600-3 MSD	MW-2B	Total/NA	Water	300.0	

Analysis Batch: 482113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	300.0	
440-213600-1	PZ-4	Total/NA	Water	300.0	
440-213600-2	MW-2A	Total/NA	Water	300.0	
440-213600-2	MW-2A	Total/NA	Water	300.0	
440-213600-3 - DL	MW-2B	Total/NA	Water	300.0	
440-213600-3	MW-2B	Total/NA	Water	300.0	
440-213600-4	DW-4	Total/NA	Water	300.0	
440-213600-4	DW-4	Total/NA	Water	300.0	
MB 440-482113/6	Method Blank	Total/NA	Water	300.0	
LCS 440-482113/5	Lab Control Sample	Total/NA	Water	300.0	
440-213600-3 MS - DL	MW-2B	Total/NA	Water	300.0	
440-213600-3 MSD - DL	MW-2B	Total/NA	Water	300.0	

Metals

Prep Batch: 483476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total Recoverable	Water	3005A	
440-213600-2	MW-2A	Total Recoverable	Water	3005A	
440-213600-3	MW-2B	Total Recoverable	Water	3005A	
440-213600-4	DW-4	Total Recoverable	Water	3005A	
MB 440-483476/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-483476/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-213600-1 MS	PZ-4	Total Recoverable	Water	3005A	
440-213600-1 MSD	PZ-4	Total Recoverable	Water	3005A	

Analysis Batch: 484019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total Recoverable	Water	6010B	483476
440-213600-2	MW-2A	Total Recoverable	Water	6010B	483476
440-213600-3	MW-2B	Total Recoverable	Water	6010B	483476
440-213600-4	DW-4	Total Recoverable	Water	6010B	483476
MB 440-483476/1-A	Method Blank	Total Recoverable	Water	6010B	483476
LCS 440-483476/2-A	Lab Control Sample	Total Recoverable	Water	6010B	483476
440-213600-1 MS	PZ-4	Total Recoverable	Water	6010B	483476
440-213600-1 MSD	PZ-4	Total Recoverable	Water	6010B	483476

Metals (Continued)

Analysis Batch: 484640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total Recoverable	Water	6010B	483476
440-213600-2	MW-2A	Total Recoverable	Water	6010B	483476
440-213600-3	MW-2B	Total Recoverable	Water	6010B	483476
440-213600-4	DW-4	Total Recoverable	Water	6010B	483476
MB 440-483476/1-A	Method Blank	Total Recoverable	Water	6010B	483476
LCS 440-483476/2-A	Lab Control Sample	Total Recoverable	Water	6010B	483476
440-213600-1 MS	PZ-4	Total Recoverable	Water	6010B	483476
440-213600-1 MSD	PZ-4	Total Recoverable	Water	6010B	483476

General Chemistry

Analysis Batch: 482326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 2320B	
440-213600-2	MW-2A	Total/NA	Water	SM 2320B	
440-213600-3	MW-2B	Total/NA	Water	SM 2320B	
440-213600-4	DW-4	Total/NA	Water	SM 2320B	
MB 440-482326/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-482326/2	Lab Control Sample	Total/NA	Water	SM 2320B	
440-213571-A-4 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 482361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 5310C	
440-213600-2	MW-2A	Total/NA	Water	SM 5310C	
440-213600-3	MW-2B	Total/NA	Water	SM 5310C	
440-213600-4	DW-4	Total/NA	Water	SM 5310C	
MB 440-482361/6	Method Blank	Total/NA	Water	SM 5310C	
LCS 440-482361/5	Lab Control Sample	Total/NA	Water	SM 5310C	
MRL 440-482361/4	Lab Control Sample	Total/NA	Water	SM 5310C	
440-213518-H-3 MS	Matrix Spike	Total/NA	Water	SM 5310C	
440-213518-H-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310C	

Prep Batch: 482836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 4500 NH3 B	
440-213600-2	MW-2A	Total/NA	Water	SM 4500 NH3 B	
MB 440-482836/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 440-482836/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
440-213806-A-3-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 B	
440-213806-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 482861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 4500 NH3 D	482836
440-213600-2	MW-2A	Total/NA	Water	SM 4500 NH3 D	482836
MB 440-482836/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 D	482836
LCS 440-482836/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	482836
440-213806-A-3-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 D	482836
440-213806-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 D	482836

General Chemistry (Continued)

Analysis Batch: 482933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 4500 S2 D	
440-213600-2	MW-2A	Total/NA	Water	SM 4500 S2 D	
440-213600-3	MW-2B	Total/NA	Water	SM 4500 S2 D	
440-213600-4	DW-4	Total/NA	Water	SM 4500 S2 D	
MB 440-482933/3	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 440-482933/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 440-482933/5	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
550-104381-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 S2 D	
550-104381-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 S2 D	

Prep Batch: 483365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-3	MW-2B	Total/NA	Water	SM 4500 NH3 B	
440-213600-4	DW-4	Total/NA	Water	SM 4500 NH3 B	
MB 440-483365/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 440-483365/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
440-214043-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 B	
440-214043-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 483384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 2540C	
440-213600-2	MW-2A	Total/NA	Water	SM 2540C	
440-213600-3	MW-2B	Total/NA	Water	SM 2540C	
440-213600-4	DW-4	Total/NA	Water	SM 2540C	
MB 440-483384/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-483384/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-213600-1 DU	PZ-4	Total/NA	Water	SM 2540C	

Analysis Batch: 483397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-3	MW-2B	Total/NA	Water	SM 4500 NH3 D	483365
440-213600-4	DW-4	Total/NA	Water	SM 4500 NH3 D	483365
MB 440-483365/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 D	483365
LCS 440-483365/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	483365
440-214043-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 D	483365
440-214043-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 D	483365

Analysis Batch: 483463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	410.4	
440-213600-2	MW-2A	Total/NA	Water	410.4	
440-213600-3	MW-2B	Total/NA	Water	410.4	
440-213600-4	DW-4	Total/NA	Water	410.4	
MB 440-483463/3	Method Blank	Total/NA	Water	410.4	
LCS 440-483463/4	Lab Control Sample	Total/NA	Water	410.4	
440-213600-1 MS	PZ-4	Total/NA	Water	410.4	
440-213600-1 MSD	PZ-4	Total/NA	Water	410.4	

General Chemistry (Continued)

Analysis Batch: 483763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-213600-1	PZ-4	Total/NA	Water	SM 4500 CO2 C	
440-213600-2	MW-2A	Total/NA	Water	SM 4500 CO2 C	
440-213600-3	MW-2B	Total/NA	Water	SM 4500 CO2 C	
440-213600-4	DW-4	Total/NA	Water	SM 4500 CO2 C	
MB 440-483763/1	Method Blank	Total/NA	Water	SM 4500 CO2 C	
440-213600-1 DU	PZ-4	Total/NA	Water	SM 4500 CO2 C	
440-213600-2 DU	MW-2A	Total/NA	Water	SM 4500 CO2 C	
440-213600-3 DU	MW-2B	Total/NA	Water	SM 4500 CO2 C	
440-213600-4 DU	DW-4	Total/NA	Water	SM 4500 CO2 C	

Qualifiers

GC/MS VOA

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

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
N	Presumptive evidence of material.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geo-Logic Associates
Project/Site: Republic Sunshine Canyon

TestAmerica Job ID: 440-213600-1

Laboratory: TestAmerica Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-19
Arizona	State Program	9	AZ0671	10-14-18
California	LA Cty Sanitation Districts	9	10256	06-30-18 *
California	State Program	9	CA ELAP 2706	06-30-18 *
Guam	State Program	9	Cert. No. 17-003R	01-23-19
Hawaii	State Program	9	N/A	01-29-19
Kansas	NELAP	7	E-10420	07-31-18
Nevada	State Program	9	CA015312018-1	07-31-18
New Mexico	State Program	6	N/A	01-29-19
Oregon	NELAP	10	4028	01-29-19
USDA	Federal		P330-15-00184	07-08-18 *
Washington	State Program	10	C900	09-03-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record 201015

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact			
Company Name: GLA/Republic	Project Manager: Kyle Welchons	Site Contact: Josh Mills	Date: 6-14-18
Address: 11415 W. Bernardo Ct.	Tel/Fax: 858-451-1136	Lab Contact: Urvashi	Carrier: TA
City/State/Zip: S.D., CA. 92127	Analysis Turnaround Time		COC No: 1 of 1 COCs
Phone: 858-451-1136	☐ CALENDAR DAYS ☐ WORKING DAYS		Sampler:
Fax: 858-451-1087	TAT if different from Below ______		For Lab Use Only:
Project Name: Republic Services	☐ 2 weeks		Walk-in Client
Site: Sunshine Cyn. Landfill	☐ 1 week		Lab Sampling:
P O # 44007851	☐ 2 days ☐ 1 day		Job / SDG No.:

Analyses: Filtered Sample (Y / N); Perform MS / MSD (Y / N); EPA 8260B-VOCs; EPA 8270 1,4-Dioxane; Total Bicarbonate; Ammonia as N; COD EPA 410.4; Chloride, Bromide; Nitrate-N, Sulfate; Colorimetric: Bicarb, Mg, Mn; K, Na; TDS (EPA 160.1); TOC (EPA 415.1); Fluoride (340.2); Sulfide (376.2); SM-4500-CO2C; Carbon Dioxide

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Analyses marked	Sample Specific Notes
PZ-4	6/14/18	1030	G	GW	13	X (all analyses)	
MW-2A	6/14/18	1035	G	GW	13	X (all analyses)	
MW-2B	6/14/18	0910	G	GW	13	X (all analyses)	
DW-4	6/14/18	0758	G	GW	13	X (all analyses)	
QCAB	6/14/18	—	G	GW	4	X (EPA 8260B-VOCs)	
QCTB	6/14/18	—	G	GW	4	X (EPA 8260B-VOCs)	

440-213600 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments: 8260B VOCs Include Dichlorodifluoromethane, MTBE and 1,4-Dioxane.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd ____ Corr'd ____ | Therm ID No.: ____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
[signature]	Geo-logic	6-14-18 / 1215	[signature]	TA	6-14-18 1215
[signature]	TA	6-14-18 1410			
			Received in Laboratory by: [signature]	TA IRV	6/14/18 1530

IR89: 2.9/2.5 21/26 IR2 7

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 440-213600-1

Login Number: 213600

List Source: TestAmerica Irvine

List Number: 1

Creator: Soderblom, Tim

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

MONTHLY VADOSE ZONE GAS MONITORING REPORTS

Geo-Logic ASSOCIATES

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: AZOMO			TEMPERATURE: 68			BARO. PRESSURE: 28.06			
GEM SERIAL #: G5046A3				WEATHER CONDITIONS: SUNNY					
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	1-24-18	814	+.07	0	2.6	17.2	80.2	2	
B-29	1-24-18	816	+.10	0	2.6	17.1	80.3	2	
C-45	1-24-18	818	-.25	0	.1	21.6	78.3	3	
D-61	1-24-18	824	-.40	0	.1	21.6	78.3	4	
E-77	1-24-18	830	-19.01	0	.1	21.6	78.3	4	
214									
A-13	1-24-18	843	+.06	0	4.7	13.2	82.1	2	
B-30	1-24-18	847	-2.32	0	2.9	19.9	77.2	2	
C-48	1-24-18	851	-1.86	0	2.5	18.9	78.3	3	
215									
A-13	1-24-18	946	-.36	0	4.8	9.9	85.3	2	
B-30	1-24-18	948	-.10	0	4.8	12.0	83.2	2	
C-47	1-24-18	952	+.46	0	.1	20.3	79.2	3	
D-64	1-24-18	958	-.01	0	.2	19.9	79.9	4	
E-81	1-24-18	1003	-.02	0	3.8	11.9	84.3	4	
216									
A-14	1-24-18	914	+.05	0	.1	21.5	78.4	2	
B-43	1-24-18	917	-.09	0	.3	21.1	78.6	2	
C-62	1-24-18	921	-.07	0	.1	20.8	79.1	3	
D-86	1-24-18	925	+.01	0	.1	20.6	79.3	4	
E-110	1-24-18	931	+.00	0	.7	19.3	80.0	4	
217									
A-13	1-24-18	1047	-.01	0	10.2	11.0	78.8	2	
B-30	1-24-18	1051	+.03	0	4.1	17.1	78.8	2	
218R									
A-11	1-24-18	1116	+.02	0	21.5	.1	78.5	2	
B-26.5	1-24-18	1119	-.33	.1	29.9	.6	70.4	2	
B-30	1-24-18	1124	+.25	0	19.4	15.9	64.7	2	
219									
A-13	1-24-18	1137	+.04	0	.6	21.7	78.7	2	
B-64	1-24-18	1141	+.06	0	4.0	12.2	83.8	2	
C-115	1-24-18	1143	+.06	0	.1	21.4	78.5	3	
D-166	1-24-18	1147	+.02	0	0	21.5	78.5	4	
E-217	1-24-18	1152	0	0	2.7	15.4	81.5	4	

SCS SIGNATURE: _____

LEA SIGNATURE _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14								2	
B-40								2	
C-87								3	
D-124								4	
E-158								4	
220B									
A-14								2	
B-38								2	
C-62								3	
D-86								4	
E-110								4	
221									
A-13								2	
B-56								2	
C-99								3	
D-142								4	
E-185								4	
222									
A-13								2	
B-54.8								2	
C-96.5								3	
D-138.3								4	
E-180								4	
223									
A-13								2	
B-37.5								2	
C-62								3	
D-86.5								4	
E-111								4	
224									
A-13	1-24-18	1321	0	0	.4	20.5	79.1	2	
B-67.5	1-24-18	1324	+.01	0	.1	21.0	78.9	2	
C-122	1-24-18	1330	+.24	0	0	21.1	78.9	3	
D-177.5	1-24-18	1325	-8.95	0	0	21.2	78.8	4	
E-232	1-24-18	1310	-6.22	0	0	21.3	78.7	4	

SCS SINGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	1-24-18	1350	-.08	0	.5	20.7	78.8	2	
B-72	1-24-18	1353	-4.94	0	.3	21.1	78.6	2	
C-1131	1-24-18	1356	-8.86	0	.6	20.7	78.7	3	
D-190	1-24-18	1400	-8.62	0	.1	21.5	78.4	4	
E-244	1-24-18	1406	-7.88	0	.4	21.1	78.5	4	
226									
A-13	1-24-18	1420	-.01	0	.1	21.7	78.2	2	
B-64	1-24-18	1424	-10.47	0	0	21.7	78.3	2	
C-114	1-24-18	1429	-9.70	0	0	21.8	78.2	3	
D-164	1-24-18	1431	-10.45	0	0	21.9	78.1	4	
E-208	1-24-18	1436	-10.46	0	.1	21.9	78.0	4	
227									
A-13	1-24-18	1445	+.03	0	.5	20.5	79.0	2	
B-48.7	1-24-18	1448	+.12	0	.1	21.7	78.2	2	
C-84.4	1-24-18	1451	+.25	0	2.1	14.3	83.6	3	
D-114	1-24-18	1454	+.34	0	1.7	16.5	81.8	4	
E-115.7	1-24-18	1458	+.09	0	.9	16.6	82.5	4	
228									
A-13	1-24-18	1507	+.21	0	.9	20.3	78.8	2	
B-63	1-24-18	1509	+1.06	0	.5	20.4	79.1	2	
C-113	1-24-18	1512	+.52	0	1.4	12.8	85.8	3	
D-163	1-24-18	1515	+.31	0	.7	20.7	78.6	4	
E-213	1-24-18	1519	+.50	0	3.3	14.0	82.7	4	
229									
A-13	1-24-18	1548	-.36	0	1.1	19.2	79.7	2	
B-48.7	1-24-18	1550	-10.10	0	.1	21.7	78.2	2	
C-84.4	1-24-18	1555	-12.57	0	.1	21.3	78.6	3	
D-114	1-24-18	1557	-13.71	0	.8	19.5	79.7	4	
E-155.7	1-24-18	1601	-10.49	0	.1	21.3	78.6	4	
* 230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
* 231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
241									
A-13	1-24-18	1619	-16.64	0	0	21.5	78.4	2	
B-28	1-24-18	1621	-7.38	0	0	21.6	78.4	2	
C-47	1-24-18	1625	-.05	0	0	21.7	78.3	3	
D-64	1-24-18	1628	-2.28	0	0	21.7	78.3	4	
E-85	1-24-18	1632	-4.55	0	0	21.7	78.3	4	

SCS SIGNATURE: 

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220	01/24/18	~~13:58~~	~~+.25~~	~~0.0~~	~~4.5~~	~~8.1~~	~~87.4~~		
A-14		13:57	+.25	0.0	4.5	8.1	87.4	2	
B-40		14:01	+.31	0.0	5.0	9.9	85.1	2	
C-87		14:06	+.34	0.0	7.9	6.8	85.3	3	
D-124		14:12	+.07	0.0	12.1	3.0	84.9	4	
E-158		14:19	+.18	0.1	13.7	1.0	85.2	4	
220B	01/24/18								
A-14	14:26	~~14:08~~	+.08	0.0	3.9	13.0	83.1	2	
B-38		14:30	+.15	0.0	9.0	1.7	89.3	2	
C-62		14:35	+.32	0.1	9.7	0.4	89.8	3	
D-86		14:44	+.24	0.0	9.3	0.7	90.0	4	
E-110		14:50	+.18	0.0	6.8	3.7	89.5	4	
221	01/24/18								
A-13		15:05	-.01	0.0	1.1	16.6	82.3	2	
B-56		15:09	+.06	0.0	7.5	0.9	91.6	2	
C-99		15:15	+.46	0.1	10.4	0.0	89.5	3	
D-142		15:25	+.19	0.0	4.1	2.0	93.9	4	
E-185		15:31	+.04	0.0	0.7	19.3	80.0	4	
222	01/24/18								
A-13		15:40	+.02	0.0	4.1	15.7	80.2	2	
B-54.8		15:43	+.01	0.0	6.1	9.4	84.5	2	
C-96.5		15:48	+.04	0.0	0.1	20.1	79.8	3	
D-138.3		15:54	-.01	0.0	4.4	14.3	81.3	4	
E-180		16:00	+.03	0.0	1.1	14.0	84.9	4	
223	01/24/18								
A-13		16:13	+.01	0.0	4.3	8.6	87.1	2	
B-37.5		16:17	+.00	0.0	4.6	8.5	86.9	2	
C-62		16:22	-.02	0.0	7.7	8.3	84.0	3	
D-86.5		16:27	-.01	0.0	1.3	17.9	80.8	4	
E-111		16:33	-.03	0.0	2.5	15.1	82.4	4	
224									
A-13								2	
B-67.5								2	
C-122								3	
D-177.5								4	
E-232								4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: AROMO | TEMPERATURE: 62 | BARO. PRESSURE: 28.07

GEM SERIAL #: G504643 | WEATHER CONDITIONS: PARTLY CLOUDY

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	
C-38								3	
203									
A-10	1-25-18	1457	+.38	0	3.8	18.3	77.9	2	
B-25	1-25-18	1459	+.09	0	3.9	17.7	78.4	2	
C-40	1-25-18	1501	+.04	0	2.5	18.8	78.7	3	
206									
A-10	1-25-18	1519	+.05	0	10.0	9.9	80.1	2	
B-25	1-25-18	1521	+.04	0	12.0	10.1	77.9	2	
C-40	1-25-18	1523	+.31	0	16.1	8.9	75.0	3	
207									
A-10	1-25-18	1041	-.09	0	1.1	20.6	78.3	2	
B-25	1-25-18	1044	-.72	0	.7	21.1	78.2	2	
C-40	1-25-18	1047	+.31	0	.1	21.6	78.3	3	
208									LOCK HAS BEEN CUT
A-9.1	1-25-18	1025	+.12	0	4.5	17.2	78.3	2	
B-25	1-25-18	1028	+.04	0	8.3	13.6	78.1	2	
C-40	1-25-18	1031	+.07	0	11.3	9.3	79.4	3	
210									
A-10	1-25-18	927	-.38	0	.2	21.7	78.1	2	LOCK HAS BEEN CUT
B-25	1-25-18	930	-.32	0	.2	21.6	78.2	2	
C-39	1-25-18	933	-.06	0	.1	21.7	78.2	3	
242									
C-42	1-25-18	1004	+.09	0	3.4	16.4	80.2	3	
D-60	1-25-18	1008	+.12	0	6.9	5.9	87.2	4	
E-78	1-25-18	1013	+.43	0	4.8	12.6	82.6	4	
243									
A-11	1-25-18	1314	+.35	0	12.9	.5	86.6	2	
B-20	1-25-18	1316	+.12	0	10.7	2.5	86.8	2	
C-33	1-25-18	1320	+.02	0	3.3	14.1	82.6	3	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	1-25-18	946	+.02	0	17.5	.4	82.1	2	
B-21	1-25-18	949	+.03	0	19.2	2.4	78.4	2	
C-36	1-25-18	952	-.62	0	17.7	6.7	75.6	3	
245									
A-11	1-25-18	1334	+.05	0	14.2	4.1	81.7	2	
B-20	1-25-18	1336	+.07	0	18.5	5.0	76.5	2	
C-35	1-25-18	1339	+.12	0	15.6	5.4	78.0	3	
D-50	1-25-18	1343	+.16	0	17.6	.8	81.6	4	
E-64	1-25-18	1348	+.15	0	8.3	41.9	79.8	4	
246									REMOVED DUE TO CONSTRUCTION
A-9								2	
B-16								2	
205R									
A-11	1-25-18	1100	+.09	0	10.1	7.6	82.3	2	
B-20	1-25-18	1103	+.05	.1	23.9	2.8	73.2	2	
C-33	1-25-18	1106	-.06	1.5	35.6	2.4	60.5	3	
D-48	1-25-18	1110	+.01	2.6	38.3	.1	59.0	4	
E-62	1-25-18	1115	+.12	.4	29.4	.2	70.0	4	
239									
A-11	1-25-18	900	+.12	0	15.1	8.7	76.2	2	
B-20	1-25-18	903	+.11	0	.1	21.8	78.1	2	
C-35	1-25-18	906	+.11	0	.1	21.9	78.0	3	
D-50	1-25-18	910	+.12	0	.1	21.9	78.0	4	
E-64	1-25-18	915	+.08	0	.1	22.0	77.9	4	
240									
A-11	1-25-18	827	+.09	0	21.9	1.8	76.5	2	
B-20	1-25-18	829	+.11	0	.2	21.8	78.0	2	
C-33	1-25-18	832	+.05	0	.1	21.8	78.1	3	
D-49	1-25-18	838	+.12	0	.1	21.8	78.1	4	
E-61	1-25-18	843	+.10	.6	.1	21.9	77.6	4	

SCS SINGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
VADOSE									
ZONE									
PV203D	01/25/18	09:34	-1.10	0.0	0.2	20.9	78.9		
			-1.66						
PV204D	01/25/18	09:00	~~0.88~~	0.0	0.7	20.2	79.1		
PV211D	01/25/18	09:26	-0.05	0.0	0.5	20.8	78.7		

SCS SIGNATURE: 

LEA SIGNATURE: _____

Sunshine Canyon Landfill - Monitoring Probes Data - 02/01/2018 to 02/28/2018

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
P-203A	2/15/2018 10:18	0.00	3.50	17.80	78.70	0.04	
P-203B	2/15/2018 10:22	0.00	4.70	16.10	79.20	-0.01	
P-203C	2/15/2018 10:26	0.00	4.20	16.00	79.80	-0.02	
P-206A	2/15/2018 10:10	0.00	8.80	12.50	78.70	-0.31	
P-206B	2/15/2018 10:12	0.00	12.40	10.10	77.50	-0.29	
P-206C	2/15/2018 10:16	0.00	21.20	5.30	73.50	-0.27	
P-207A	2/15/2018 10:23	0.00	0.80	20.20	79.00	-0.56	
P-207B	2/15/2018 10:25	0.00	0.50	20.50	79.00	-25.63	
P-207C	2/15/2018 10:29	0.00	0.00	20.80	79.20	-0.18	
P-208A	2/15/2018 09:58	0.00	3.60	18.10	78.30	-0.29	
P-208B	2/15/2018 10:00	0.00	7.40	13.60	79.00	-0.33	
P-208C	2/15/2018 10:03	0.00	10.40	10.00	79.60	-0.28	
P-210A	2/15/2018 09:09	0.00	0.10	20.90	79.00	-0.72	
P-210B	2/15/2018 09:11	0.00	0.10	20.80	79.10	-0.37	
P-210C	2/15/2018 09:15	0.00	0.10	20.90	79.00	-0.44	
P-213A	2/13/2018 08:49	0.00	1.80	17.80	80.40	-0.18	
P-213B	2/13/2018 08:52	0.00	0.00	21.00	79.00	-0.23	
P-213C	2/13/2018 08:56	0.00	0.00	21.10	78.90	-0.89	
P-213D	2/13/2018 09:01	0.00	0.00	21.00	79.00	-1.11	
P-213E	2/13/2018 09:06	0.00	0.00	20.90	79.10	-16.36	
P-214A	2/13/2018 09:18	0.00	8.20	7.70	84.10	-0.37	
P-214A	2/13/2018 09:21	0.00	8.20	7.80	84.00	-0.37	
P-214B	2/13/2018 09:24	0.10	0.10	20.50	79.30	-4.65	
P-214C	2/13/2018 09:31	0.10	1.90	19.20	78.80	-3.47	
P-215A	2/13/2018 09:46	0.00	3.90	12.70	83.40	-0.29	
P-215B	2/13/2018 09:49	0.00	1.90	18.30	79.80	-0.33	
P-215C	2/13/2018 09:53	0.00	0.00	21.00	79.00	-1.66	
P-215D	2/13/2018 09:58	0.00	1.20	18.70	80.10	0.04	
P-215E	2/13/2018 10:03	0.00	3.40	13.00	83.60	-0.24	
P-216A	2/13/2018 10:22	0.00	0.00	20.60	79.40	-0.17	

Sunshine Canyon Landfill - Monitoring Probes Data - 02/01/2018 to 02/28/2018

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
P-216B	2/13/2018 10:25	0.00	0.00	20.70	79.30	-0.37	
P-216C	2/13/2018 10:29	0.00	0.00	20.60	79.40	-0.21	
P-216D	2/13/2018 10:34	0.00	0.00	20.70	79.30	-0.26	
P-216E	2/13/2018 10:39	0.00	0.00	20.60	79.40	-0.25	
P-217A	2/13/2018 10:49	0.00	5.40	15.50	79.10	-0.18	
P-217B	2/13/2018 10:52	0.00	3.20	18.00	78.80	-0.20	
P-219A	2/13/2018 11:32	0.00	0.50	20.20	79.30	-0.17	
P-219B	2/13/2018 11:35	0.00	4.30	10.60	85.10	-0.07	
P-219C	2/13/2018 11:39	0.00	0.20	20.60	79.20	-0.17	
P-219D	2/13/2018 11:44	0.00	0.00	21.20	78.80	-0.17	
P-219E	2/13/2018 11:49	0.00	2.30	15.70	82.00	-0.17	
P-220A	2/13/2018 08:31	0.00	4.20	15.40	80.40	-0.02	
P-220B	2/13/2018 08:36	0.00	0.10	21.10	78.80	-0.01	
P-220C	2/13/2018 08:41	0.00	0.50	20.50	79.00	-0.03	
P-220D	2/13/2018 08:47	0.00	0.10	21.20	78.70	-0.07	
P-220E	2/13/2018 08:53	0.00	0.70	19.30	80.00	-0.12	
P-221A	2/13/2018 09:31	0.00	1.10	19.40	79.50	0.03	
P-221B	2/13/2018 09:34	0.00	0.50	19.70	79.80	-0.04	
P-221C	2/13/2018 09:39	0.00	0.70	19.70	79.60	-0.58	
P-221D	2/13/2018 09:44	0.00	0.10	19.90	80.00	-0.18	
P-221E	2/13/2018 09:51	0.00	0.10	19.70	80.20	-0.06	
P-222A	2/13/2018 10:25	0.00	2.20	19.10	78.70	-0.01	
P-222B	2/13/2018 10:29	0.00	0.10	20.90	79.00	-0.04	
P-222C	2/13/2018 10:34	0.00	0.10	20.90	79.00	-0.03	
P-222D	2/13/2018 10:40	0.00	2.50	18.40	79.10	-0.09	
P-222E	2/13/2018 10:49	0.00	0.10	20.60	79.30	-0.31	
P-223A	2/13/2018 10:59	0.00	4.30	8.80	86.90	0.04	
P-223B	2/13/2018 11:03	0.00	5.50	6.40	88.10	-0.03	
P-223C	2/13/2018 11:08	0.00	0.50	19.70	79.80	0.01	
P-223D	2/13/2018 11:13	0.00	1.40	17.90	80.70	-0.03	

Sunshine Canyon Landfill - Monitoring Probes Data - 02/01/2018 to 02/28/2018

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
P-223E	2/13/2018 11:20	0.00	3.10	13.80	83.10	-0.01	
P-224A	2/13/2018 11:34	0.00	0.20	20.60	79.20	-0.02	
P-224B	2/13/2018 11:37	0.00	0.00	20.80	79.20	-0.05	
P-224C	2/13/2018 11:42	0.00	0.00	20.90	79.10	-0.07	
P-224D	2/13/2018 11:47	0.00	0.00	21.00	79.00	-11.99	
P-224E	2/13/2018 11:53	0.00	0.00	21.00	79.00	-9.10	
P-225A	2/13/2018 14:05	0.00	0.60	20.60	78.80	-0.06	
P-225B	2/13/2018 14:09	0.00	0.30	21.00	78.70	-5.54	
P-225C	2/13/2018 14:13	0.00	0.70	20.80	78.50	-10.45	
P-225D	2/13/2018 14:20	0.00	0.10	20.90	79.00	-10.88	
P-225E	2/13/2018 14:25	0.00	0.40	20.60	79.00	-10.18	
P-226A	2/13/2018 14:33	0.00	0.10	21.00	78.90	-0.04	
P-226B	2/13/2018 14:37	0.00	0.10	21.10	78.80	-12.15	
P-226C	2/13/2018 14:43	0.00	0.10	21.00	78.90	-12.10	
P-226D	2/13/2018 14:49	0.00	0.10	21.30	78.60	-12.49	
P-226E	2/13/2018 14:56	0.00	0.10	20.90	79.00	-12.75	
P-227A	2/13/2018 13:58	0.00	0.10	22.60	77.30	-0.21	
P-227B	2/13/2018 14:01	0.00	0.00	22.60	77.40	-1.26	
P-227C	2/13/2018 14:05	0.00	0.00	22.70	77.30	-1.13	
P-227D	2/13/2018 14:12	0.00	1.60	17.50	80.90	-0.91	
P-227E	2/13/2018 14:17	0.00	1.90	18.40	79.70	-0.48	
P-228A	2/13/2018 14:24	0.00	0.80	20.70	78.50	-0.21	
P-228B	2/13/2018 14:26	0.00	3.00	14.80	82.20	-1.26	
P-228C	2/13/2018 14:30	0.00	0.00	23.00	77.00	-0.93	
P-228D	2/13/2018 14:35	0.00	1.00	21.80	77.20	-0.48	
P-228E	2/13/2018 14:39	0.00	0.90	22.00	77.10	-0.66	
P-229A	2/13/2018 13:35	0.00	0.70	19.70	79.60	-1.17	
P-229B	2/13/2018 13:38	0.00	0.30	21.00	78.70	-11.11	
P-229C	2/13/2018 13:41	0.00	0.10	22.00	77.90	-15.10	
P-229D	2/13/2018 13:46	0.00	0.40	21.20	78.40	-16.74	

Sunshine Canyon Landfill - Monitoring Probes Data - 02/01/2018 to 02/28/2018

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
P-229E	2/13/2018 13:51	0.00	0.00	22.70	77.30	-22.50	
P-239A	2/15/2018 08:45	0.00	11.70	12.20	76.10	-0.07	
P-239B	2/15/2018 08:48	0.00	0.10	21.40	78.50	-0.37	
P-239C	2/15/2018 08:52	0.00	0.10	21.30	78.60	-0.38	
P-239D	2/15/2018 08:57	0.00	0.10	21.20	78.70	-0.39	
P-239E	2/15/2018 09:06	0.00	0.10	21.20	78.70	-0.35	
P-240A	2/15/2018 08:20	0.00	14.90	8.20	76.90	-0.50	
P-240A	2/20/2018 13:25	0.00	19.30	4.00	76.70	-0.01	
P-240B	2/15/2018 08:23	0.00	0.10	21.00	78.90	-0.46	
P-240B	2/20/2018 13:29	0.00	0.10	20.90	79.00	-0.02	
P-240C	2/15/2018 08:27	0.00	0.10	21.20	78.70	-0.45	
P-240C	2/20/2018 13:33	0.00	0.10	21.10	78.80	0.03	
P-240D	2/15/2018 08:32	0.00	0.10	21.40	78.50	-0.43	
P-240D	2/20/2018 13:39	0.00	0.10	21.00	78.90	0.02	
P-240E	2/15/2018 08:36	3.60	0.20	20.70	75.50	-0.44	
P-240E	2/20/2018 13:45	0.20	0.10	21.10	78.60	0.01	
P-241A	2/13/2018 08:22	0.00	0.00	20.40	79.60	-18.22	
P-241B	2/13/2018 08:25	0.00	0.00	20.50	79.50	-11.38	
P-241C	2/13/2018 08:29	0.00	0.00	20.60	79.40	-0.61	
P-241D	2/13/2018 08:33	0.00	0.00	20.70	79.30	-11.12	
P-241E	2/13/2018 08:38	0.00	0.00	20.80	79.20	-8.58	
P-242C	2/15/2018 09:23	0.00	3.00	16.30	80.70	0.07	
P-242D	2/15/2018 09:28	0.00	7.90	2.90	89.20	-0.34	
P-242E	2/15/2018 09:32	0.00	5.20	12.10	82.70	-0.02	
P-243A	2/15/2018 10:37	0.00	12.50	0.10	87.40	-0.02	
P-243B	2/15/2018 10:41	0.00	3.80	13.30	82.90	-0.03	
P-243C	2/15/2018 10:46	0.00	3.20	13.90	82.90	0.00	
P-244A	2/15/2018 09:40	0.00	15.50	2.20	82.30	-0.42	
P-244B	2/15/2018 09:44	0.10	17.00	4.60	78.30	-0.37	
P-244C	2/15/2018 09:50	0.00	17.10	7.60	75.30	-0.39	

Sunshine Canyon Landfill - Monitoring Probes Data - 02/01/2018 to 02/28/2018

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
P-245A	2/15/2018 09:44	0.00	12.20	6.40	81.40	-0.02	
P-245B	2/15/2018 09:48	0.00	21.40	2.00	76.60	-0.04	
P-245C	2/15/2018 09:53	0.00	21.90	0.70	77.40	-0.02	
P-245D	2/15/2018 09:58	0.00	18.10	0.50	81.40	-0.07	
P-245E	2/15/2018 10:05	0.00	0.10	20.60	79.30	-0.14	
P-205RA	2/15/2018 10:48	0.00	11.50	6.40	82.10	-0.23	
P-205RB	2/15/2018 10:51	0.30	13.20	11.00	75.50	0.11	
P-205RC	2/15/2018 10:57	1.40	34.20	4.10	60.30	0.51	
P-205RD	2/15/2018 11:02	2.50	43.90	0.20	53.40	-0.24	
P-205RE	2/15/2018 11:07	1.50	36.40	0.10	62.00	-0.17	
P-218RA	2/13/2018 11:06	0.00	26.60	0.10	73.30	-0.19	
P-218RB	2/13/2018 11:08	0.10	26.90	5.10	67.90	0.39	
P-218RC	2/13/2018 11:14	0.00	13.00	17.60	69.40	-0.21	
P-220BA	2/13/2018 09:01	0.00	3.30	17.60	79.10	0.01	
P-220BB	2/13/2018 09:05	0.00	0.20	20.70	79.10	-0.15	
P-220BC	2/13/2018 09:09	0.00	4.60	15.10	80.30	-0.43	
P-220BD	2/13/2018 09:15	0.00	5.30	14.50	80.20	-0.47	
P-220BE	2/13/2018 09:21	0.00	1.90	18.90	79.20	-0.31	

TOTAL PROBES

138	**MAX**	3.60	43.90	23.00	89.20	0.51
	MIN	0.00	0.00	0.10	53.40	-25.63

Saulo Diaz 02/20/18

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11								2	
B-21								2	
C-36								3	
245									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11								2	
B-20								2	
C-33								3	
D-48								4	
E-62								4	
239									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
240									
A-11	02/20/18	13:25	-0.01	0.0	19.3	4.0	76.7	2	
B-20	02/20/18	13:29	-0.02	0.0	0.1	20.9	79.0	2	
C-33	02/20/18	13:33	+0.03	0.0	0.1	21.1	78.8	3	
D-49	02/20/18	13:39	+0.02	0.0	0.1	21.0	78.9	4	
E-61	02/20/18	13:45	+0.01	0.2	0.1	21.1	78.6	4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: A Romo | TEMPERATURE: 64 | BARO. PRESSURE: 30.2

GEM SERIAL #: 6503926 | WEATHER CONDITIONS: SUNNY

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	3-27-18	835	+.06	0	.1	21.7	78.2	2	
B-29	3-27-18	838	+.05	0	.1	21.7	78.2	2	
C-45	3-27-18	841	-.57	0	.1	21.8	78.1	3	
D-61	3-27-18	845	-.89	0	0	21.8	78.2	4	
E-77	3-27-18	850	-15.16	0	.1	21.8	78.1	4	
214									
A-13	3-27-18	859	-2.83	0	.3	21.7	78.0	2	
B-30	3-27-18	902	-3.54	0	.3	21.2	78.5	2	
C-48	3-27-18	905	-2.84	0	.3	21.9	77.8	3	
215									
A-13	3-27-18	930	-.19	0	3.4	12.8	83.8	2	
B-30	3-27-18	933	+.07	0	5.0	12.6	82.4	2	
C-47	3-27-18	936	+.32	0	.1	21.3	78.6	3	
D-64	3-27-18	940	-.57	0	.1	21.2	78.7	4	
E-81	3-27-18	945	-.26	0	3.0	13.6	83.4	4	
216									
A-14	3-27-18	959	-.05	0	.1	21.7	78.2	2	
B-43	3-27-18	1002	-.05	0	.1	21.8	78.1	2	
C-62	3-27-18	1005	0	0	.1	21.6	78.3	3	
D-86	3-27-18	1009	-.01	0	0	21.6	78.4	4	
E-110	3-27-18	1015	+.24	0	.1	21.3	78.6	4	
217									
A-13	3-27-18	1028	-.46	0	8.0	12.9	79.1	2	
B-30	3-27-18	1031	-.57	0	4.1	15.7	80.2	2	
218R									
A-11	3-27-18	1045	+.13	0	23.7	0	76.3	2	
B-26.5	3-27-18	1048	+.17	0	29.5	0	70.5	2	
B-30	3-27-18	1051	+.06	0	28.0	13.4	58.6	2	
219									
A-13	3-27-18	1107	+.17	0	1.2	18.2	80.6	2	
B-64	3-27-18	1110	-.14	0	4.1	9.2	86.7	2	
C-115	3-27-18	1113	+.13	0	1.8	15.4	82.8	3	
D-166	3-27-18	1117	+.61	0	.1	21.4	78.5	4	
E-217	3-27-18	1122	+.11	0	2.1	14.8	83.1	4	

SCS SIGNATURE: _____

LEA SIGNATURE _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

M. QUEN GEM # G504541

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220	3/27/18		~~+0.08~~						
A-14		13:12	+0.08	1.8	8.1	0.2	89.9	2	
B-40		13:15	+0.11	0.1	7.7	3.2	89.0	2	
C-87		13:19	+0.16	0.4	10.2	3.6	85.8	3	
D-124		13:24	+0.06	0	13.6	1.3	85.1	3	
E-158	3/27/18	13:29	+0.24	0.4	13.0	0.5	86.1	4	
220B	3/27/18								
A-14		13:36	+0.02	0	2.8	16.5	80.7	2	VAULT NEEDS LOCK (RED)
B-38		13:40	+0.08	0	0.1	20.9	79.0	2	
C-62		13:44	+0.03	0	4.3	14.3	81.4	3	
D-86		13:49	-0.03	0	6.9	8.8	84.3	4	
E-110	3/27/18	13:54	+0.02	0	2.6	16.4	81.0	4	
221									
A-13	3/27/18	~~14:01~~	-0.02	0	1.4	18.3	80.3	2	
B-56		14:05	+0.09	0	1.0	18.5	80.5	2	
C-99		14:09	+0.08	0	1.3	19.4	79.3	3	
D-142		14:14	+0.07	0	0.1	20.5	79.4	4	
E-185	3/27/18	14:19	+0.06	0	0.1	20.8	79.1	4	
222									
A-13	3/27/18	14:25	+0.05	0	4.2	15.7	80.1	2	
B-54.8		14:28	+0.04	0	0.4	20.0	79.6	2	
C-96.5		14:33	+0.03	0	0.3	20.5	79.2	3	
D-138.3		14:38	-0.03	0	4.3	15.6	80.1	4	
E-180	3/27/18	14:43	-0.00	0	0.1	20.9	79.0	4	
223	3/27/18								
A-13		14:54	+0.05	0.1	4.3	8.2	87.4	2	
B-37.5		14:57	+0.04	0.1	3.8	9.3	86.8	2	
C-62		15:02	0.00	0	0.9	18.3	80.8	3	
D-86.5		15:07	+0.04	0	1.7	15.9	82.4	4	
E-111	3/27/18	15:12	0.00	0	1.7	15.6	82.7	4	
224									
A-13								2	
B-67.5								2	
C-122								3	
D-177.5								4	
E-232								4	

SCS SINGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14								2	
B-40								2	
C-87								3	
D-124								4	
E-158								4	
220B									
A-14								2	
B-38								2	
C-62								3	
D-86								4	
E-110								4	
221									
A-13								2	
B-56								2	
C-99								3	
D-142								4	
E-185								4	
222									
A-13								2	
B-54.8								2	
C-96.5								3	
D-138.3								4	
E-180								4	
223									
A-13								2	
B-37.5								2	
C-62								3	
D-86.5								4	
E-111								4	
224									
A-13	3.27.18	1457	+.22	0	5	20.2	79.3	2	
B-67.5	3.27.18	1500	+.21	0	0	21.1	78.9	2	
C-122	3.27.18	1503	+.21	0	0	21.0	79.0	3	
D-177.5	3.27.18	1507	-12.35	0	0	20.8	79.2	4	
E-232	3.27.18	1512	-9.18	0	0	20.5	79.5	4	

SCS SINGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	3-27-18	1434	+.62	0	.4	21.1	78.5	2	
B-72	3-27-18	1437	-5.96	0	.1	21.7	78.2	2	
C-1131	3-27-18	1440	-10.15	0	.8	20.4	78.8	3	
D-190	3-27-18	1444	-10.92	0	0	21.6	78.4	4	
E-244	3-27-18	1449	-10.24	0	.5	20.4	79.1	4	
226									
A-13	3-27-18	1315	+.12	0	0	21.9	78.1	2	
B-64	3-27-18	1318	-12.43	0	.1	21.9	78.0	2	
C-114	3-27-18	1321	-12.32	0	.1	22.3	77.6	3	
D-164	3-27-18	1325	-12.44	0	0	22.6	77.4	4	
E-208	3-27-18	1330	-13.13	0	0	22.9	77.1	4	
227									
A-13	3-27-18	1339	+.17	0	0	22.8	77.2	2	
B-48.7	3-27-18	1342	-.46	0	0	22.5	77.5	2	
C-84.4	3-27-18	1346	-.55	0	.3	21.8	77.9	3	
D-114	3-27-18	1350	-.58	0	.2	22.0	77.8	4	
E-115.7	3-27-18	1355	-.40	0	.6	21.1	78.3	4	
228									
A-13	3-27-18	1403	-.3	0	.3	21.3	78.4	2	
B-63	3-27-18	1407	-.60	0	2.5	15.0	82.5	2	
C-113	3-27-18	1410	-.31	0	.3	21.8	77.9	3	
D-163	3-27-18	1414	-.39	0	1.7	20.1	78.2	4	
E-213	3-27-18	1419	-.43	0	2.4	17.6	80.0	4	
229									
A-13	3-27-18	1527	-.77	0	.7	15.5	83.8	2	
B-48.7	3-27-18	1530	-11.66	0	.3	16.6	83.1	2	
C-84.4	3-27-18	1533	-13.71	0	0	17.8	82.2	3	
D-114	3-27-18	1537	-15.96	0	.5	16.6	82.9	4	
E-155.7	3-27-18	1542	-23.38	0	0	18.5	81.5	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

2806

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
241									
A-13	3-27-18	807	-14.83	0	.1	21.5	78.4	2	
B-28	3-27-18	810	-9.72	0	.1	21.6	78.3	2	
C-47	3-27-18	813	0	0	.1	21.6	78.3	3	
D-64	3-27-18	817	-11.83	0	.1	21.7	78.2	4	
E-85	3-27-18	822	+.03	0	.1	21.7	78.2	4	

SCS SIGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: Saulo Diaz			TEMPERATURE: 72°F			BARO. PRESSURE: 30.1"			
GEM SERIAL #: G504541				WEATHER CONDITIONS: clear & sunny					
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	03/29/18	08:06	+0.01	0.0	4.2	16.7	79.1	2	
B-25	03/29/18	08:09	+0.01	0.0	4.3	16.6	79.1	2	
C-40	03/29/18	08:14	-0.01	0.0	3.6	17.0	79.4	3	
206									
A-10								2	
B-25								2	
C-40								3	
207									
A-10	03/29/18	10:33	-0.28	0.0	1.2	19.2	79.6	2	
B-25	03/29/18	1037	-0.02	0.0	0.5	19.7	79.8	2	
C-40	03/29/18	10:42	+0.07	0.0	0.1	20.2	79.7	3	
208									
A-9.1								2	
B-25								2	
C-40								3	
210									
A-10								2	
B-25								2	
C-39								3	
242									
C-42								3	
D-60								4	
E-78								4	
243									
A-11	03/29/18	09:34	0 to 0.01	0.1	13.1	0.1	86.7	2	
B-20	03/29/18	09:38	-0.06	0.0	11.3	2.1	86.6	2	
C-33	03/29/18	09:41	-0.03	0.0	2.6	14.7	82.7	3	

SCS SIGNATURE: Saulo Diaz

LEA SIGNATURE _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: A ROMO			TEMPERATURE: 68			BARO. PRESSURE: 28.17			
GEM SERIAL #: 504643				WEATHER CONDITIONS: SUNNY					
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10								2	
B-25								2	
C-40								3	
206									
A-10	3-29-18	1029	+.02	0	9.3	7.2	83.5	2	
B-25	3-29-18	1032	0	0	13.1	5.5	81.4	2	
C-40	3-29-18	1035	-.01	0	20.0	4.8	75.2	3	
207									
A-10								2	
B-25								2	
C-40								3	
208									
A-9.1	3-29-18	1015	+.10	0	7.5	10.0	82.5	2	
B-25	3-29-18	1018	+.82	0	13.4	6.3	80.3	2	
C-40	3-29-18	1021	+.03	0	16.6	2.7	80.7	3	
210									
A-10	3-29-18	919	-.63	0	.2	19.7	80.1	2	
B-25	3-29-18	922	-.78	0	.2	19.7	80.1	2	
C-39	3-29-18	925	-.17	0	.1	20.0	79.9	3	
242									
C-42	3-29-18	941	+.04	0	2.9	17.3	79.8	3	
D-60	3-29-18	945	+.09	0	6.5	5.7	87.8	4	
E-78	3-29-18	950	+.08	0	4.6	14.7	80.7	4	
243									
A-11								2	
B-20								2	
C-33								3	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

A. ROMO GEM# 504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	3-29-18	1000	+.04	.1	17.1	0	82.8	2	
B-21	3-29-18	1003	-.02	.2	20.0	0	79.8	2	
C-36	3-29-18	1006	+.08	0	23.6	.9	75.5	3	
245									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11								2	
B-20								2	
C-33								3	
D-48								4	
E-62								4	
239									
A-11	3-29-18	853	+.37	0	12.6	10.1	77.3	2	
B-20	3-29-18	856	+.15	0	.1	21.0	78.9	2	
C-35	3-29-18	859	+.16	0	.1	20.9	79.0	3	
D-50	3-29-18	903	+.12	0	.1	20.6	79.3	4	
E-64	3-29-18	908	+.06	0	.1	20.2	79.7	4	
240									
A-11	3-29-18	828	+.07	0	18.2	2.6	79.2	2	
B-20	3-29-18	831	+.15	0	.1	20.9	79.0	2	
C-33	3-29-18	834	+.10	0	.1	21.1	78.8	3	
D-49	3-29-18	838	+.16	0	.1	21.1	78.8	4	
E-61	3-29-18	843	+.19	.3	.1	21.3	78.3	4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

S. DIAZ CEM # 50454)

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11								2	
B-21								2	
C-36								3	
245									
A-11	03/29/18	08:30	-0.02	0.0	13.3	4.3	82.4	2	
B-20	03/29/18	08:33	0.00	0.0	24.8	1.0	74.2	2	
C-35	03/29/18	08:38	-0.03	0.0	22.8	0.4	76.8	3	
D-50	03/29/18	08:43	-0.08	0.0	18.1	1.2	80.7	4	
E-64	03/29/18	08:54	+0.01	0.0	8.9	3.0	88.1	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	03/29/18	10:01	-0.11	0.0	9.1	5.7	85.2	2	
B-20	03/29/18	10:05	-0.01	0.2	23.5	1.1	75.2	2	
C-33	03/29/18	10:09	-0.39	1.5	36.3	1.8	60.4	3	
D-48	03/29/18	10:14	-0.04	2.9	43.2	0.1	53.8	4	
E-62	03/29/18	10:21	-0.15	0.4	26.0	0.2	73.4	4	
239									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
240									
A-11								2	
B-20								2	
C-33								3	
D-49								4	
E-61								4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM #50454

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
VADOSE									
ZONE									
PV203D	03/29/18	09:17	-6.28	0.0	0.1	20.9	79.0		
PV204D	03/29/18	10:46	-1.81	0.0	1.7	18.6	79.7		
PV211D	03/29/18	09:07	-3.67	0.0	0.1	20.4	79.5		

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: Saulo Diaz | TEMPERATURE: 60°F | BARO. PRESSURE: 30.2"

GEM SERIAL #: G504541 | WEATHER CONDITIONS: Sunny / wind: NE 11 mph

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	04/17/18	08:04	-0.05	0.0	0.1	21.0	78.9	2	
B-29	04/17/18	08:07	-0.03	0.0	0.1	21.1	78.8	2	
C-45	04/17/18	08:13	-0.55	0.0	0.1	21.0	78.9	3	
D-61	04/17/18	08:18	-0.81	0.0	0.1	21.0	78.9	4	
E-77	04/17/18	08:23	-14.49	0.0	0.1	21.0	78.9	4	
214									
A-13	04/17/18	09:11	-0.06	0.0	7.6	8.9	83.5	2	
B-30	04/17/18	09:14	-14.39	0.0	0.1	19.9	80.0	2	
C-48	04/17/18	09:20	-19.39	0.0	1.0	20.0	79.0	3	
215									
A-13	04/17/18	08:41	+0.02	0.0	3.7	13.6	82.7	2	
B-30	04/17/18	08:48	+0.02	0.0	4.5	12.6	82.9	2	
C-47	04/17/18	08:52	-0.00	0.0	0.1	20.2	79.7	3	
D-64	04/17/18	08:57	-0.03	0.0	0.3	19.7	80.0	4	
E-81	04/17/18	09:03	-0.02	0.0	3.0	14.2	82.8	4	
216									
A-14	04/17/18	09:34	-0.17	0.0	0.2	20.7	79.1	2	
B-43	04/17/18	09:38	-0.02	0.0	0.1	20.8	79.1	2	
C-62	04/17/18	09:43	-0.07	0.0	0.1	20.8	79.1	3	
D-86	04/17/18	09:49	-0.09	0.0	0.1	20.8	79.1	4	
E-110	04/17/18	09:54	-0.15	0.0	0.1	20.7	79.2	4	
217									
A-13	04/17/18	10:07	-0.01	0.0	7.1	13.1	79.8	2	
B-30	04/17/18	10:10	-0.04	0.0	6.6	12.6	80.8	2	
218R									
A-11	04/17/18	10:24	-0.05	0.0	24.6	0.0	75.4	2	
B-26.5	04/17/18	10:29	-0.11	0.0	26.0	0.0	74.0	2	
B-30	04/17/18	10:32	-1.93	0.0	1.8	19.0	79.2	2	
219									
A-13	04/17/18	10:45	-0.02	0.0	1.7	18.5	79.8	2	
B-64	04/17/18	10:48	-0.03	0.0	5.1	9.9	85.0	2	
C-115	04/17/18	10:52	-0.07	0.0	0.5	20.4	79.1	3	
D-166	04/17/18	10:59	-0.04	0.0	0.3	20.7	79.0	4	
E-217	04/17/18	11:04	-0.05	0.0	2.5	16.5	81.0	4	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

ALBERT ADMO GEM 6504543

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	4-17-18	743	+.13	Ø	6.2	11.2	82.6	2	
B-40	4-17-18	746	+.18	Ø	.1	22.7	77.2	2	
C-87	4-17-18	749	+.04	Ø	1.3	20.5	78.2	3	
D-124	4-17-18	753	+.17	.1	.3	22.6	77.0	4	
E-158	4-17-18	758	-.02	.3	.9	20.9	77.9	4	
220B									
A-14	4-17-18	811	+.16	Ø	2.9	19.0	78.1	2	
B-38	4-17-18	814	+.02	Ø	.1	22.9	77.0	2	
C-62	4-17-18	817	+.16	Ø	4.8	14.0	81.2	3	
D-86	4-17-18	821	-.50	Ø	4.4	16.2	79.4	4	
E-110	4-17-18	826	-.16	Ø	3.5	17.9	78.6	4	
221									
A-13	4-17-18	841	+.35	Ø	1.3	21.3	77.4	2	
B-56	4-17-18	844	-.01	Ø	.6	21.9	77.5	2	
C-99	4-17-18	847	-.29	Ø	1.2	21.6	77.2	3	
D-142	4-17-18	851	-.04	Ø	.1	22.6	77.3	4	
E-185	4-17-18	856	+.05	Ø	.1	22.5	77.4	4	
222									
A-13	4-17-18	904	+.08	Ø	2.7	19.6	77.7	2	
B-54.8	4-17-18	907	+.03	Ø	.1	22.3	77.6	2	
C-96.5	4-17-18	910	+.04	Ø	.1	22.2	77.7	3	
D-138.3	4-17-18	914	-.03	Ø	3.4	18.3	78.3	4	
E-180	4-17-18	919	+.02	Ø	.1	22.0	77.9	4	
223									
A-13	4-17-18	952	+.05	Ø	5.8	10.3	83.9	2	
B-37.5	4-17-18	955	+.08	Ø	6.0	8.7	85.3	2	
C-62	4-17-18	958	+.05	Ø	.8	20.5	78.7	3	
D-86.5	4-17-18	1002	+.02	Ø	1.9	18.4	79.7	4	
E-111	4-17-18	1007	+.19	Ø	3.2	16.0	80.8	4	
224									
A-13	4-17-18	1018	+.02	Ø	.1	22.0	77.9	2	
B-67.5	4-17-18	1020	+.04	Ø	Ø	22.0	78.0	2	
C-122	4-17-18	1028	-.05	Ø	Ø	21.8	78.2	3	
D-177.5	4-17-18	1027	-13.70	Ø	Ø	21.6	78.4	4	
E-232	4-17-18	1032	-10.11	Ø	Ø	21.5	78.5	4	

SCS SINGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

ALBERT ROMO GEM G504543

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	4-17-18	1041	-.10	0	.6	21.1	78.3	2	
B-72	4-17-18	1045	-.50	0	.3	20.9	78.8	2	
C-1131	4-17-18	1047	-11.60	0	1.1	20.1	78.8	3	
D-190	4-17-18	1051	-11.79	0	.1	21.3	78.6	4	
E-244	4-17-18	1056	-10.95	0	.8	20.4	78.8	4	
226									
A-13	4-17-18	1105	-.05	0	0	21.5	78.5	2	
B-64	4-17-18	1108	-13.09	0	.1	21.5	78.4	2	
C-114	4-17-18	1110	-12.55	0	.1	21.6	78.3	3	
D-164	4-17-18	1114	-13.35	0	0	21.7	78.3	4	
E-208	4-17-18	1118	-14.64	0	0	21.6	78.4	4	
227									
A-13	4-17-18	1333	-.12	0	0	22.3	77.7	2	
B-48.7	4-17-18	1336	-1.00	0	.2	21.7	78.1	2	
C-84.4	4-17-18	1338	-1.01	0	.3	21.3	78.4	3	
D-114	4-17-18	1342	-1.34	0	.4	20.9	78.7	4	
E-115.7	4-17-18	1347	-.76	0	.5	20.5	79.0	4	
228									
A-13	4-17-18	1357	-.18	0	.5	20.5	79.0	2	
B-63	4-17-18	1401	-1.14	0	3.6	12.5	83.9	2	
C-113	4-17-18	1404	-.79	0	.2	21.8	78.0	3	
D-163	4-17-18	1407	-.81	0	.7	21.3	78.0	4	
E-213	4-17-18	1412	-1.60	0	1.4	19.2	79.4	4	
229									
A-13								2	
B-48.7								2	
C-84.4								3	
D-114								4	
E-155.7								4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

SAULO DIAZ GEM G50454)

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13								2	
B-72								2	
C-1131								3	
D-190								4	
E-244								4	
226									
A-13								2	
B-64								23	
C-114								3	
D-164								4	
E-208								4	
227									
A-13								2	
B-48.7								2	
C-84.4								3	
D-114								4	
E-115.7								4	
228									
A-13								2	
B-63								2	
C-113								3	
D-163								4	
E-213								4	
229									
A-13	04/17/18	11:25	-1.16	0.0	0.9	18.1	81.0	2	
B-48.7	04/17/18	11:32	-12.81	0.0	0.3	20.1	79.6	2	
C-84.4	04/17/18	11:36	-15.38	0.0	0.1	20.9	79.0	3	
D-114	04/17/18	11:41	-17.41	0.0	0.4	19.6	80.0	4	
E-155.7	04/17/18	11:48	-25.01	0.0	0.1	21.1	78.8	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: Saulo Diaz LEA SIGNATURE:_____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

SAULO DIAZ GEM 650454)

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
241									
A-13	04/17/18	07:26	-15.80	0.0	0.1	21.2	78.7	2	
B-28	04/17/18	07:30	-8.79	0.0	0.1	21.0	78.9	2	
C-47	04/17/18	07:37	-0.03	0.0	0.1	21.1	78.8	3	
D-64	04/17/18	07:42	-10.89	0.0	0.1	21.3	78.6	4	
E-85	04/17/18	07:49	-11.29	0.0	0.1	21.0	78.9	4	

SCS SIGNATURE: Saulo Diaz

LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: Saulo Diaz | TEMPERATURE: 53°F | BARO. PRESSURE: 30"

GEM SERIAL #: GS04643 | WEATHER CONDITIONS: Partly Cloudy / wind: SW 7 mph

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	04/19/18	08:09	+0.03	0.0	4.6	17.1	78.3	2	
B-25	04/19/18	08:12	-0.01	0.0	4.8	16.4	78.8	2	
C-40	04/19/18	08:17	-0.00	0.0	4.6	16.5	78.9	3	
206									
A-10	04/19/18	10:37	-0.03	0.0	11.2	9.6	79.2	2	
B-25	04/19/18	10:43	-0.03	0.0	13.8	6.5	79.7	2	
C-40	04/19/18	10:46	-0.08	0.0	21.3	3.9	74.8	3	
207									
A-10								2	
B-25								2	
C-40								3	
208									
A-9.1								2	
B-25								2	
C-40								3	
210									
A-10								2	
B-25								2	
C-39								3	
242									
C-42								3	
D-60								4	
E-78								4	
243									
A-11	04/19/18	09:36	-0.05	0.1	13.2	0.2	86.5	2	
B-20	04/19/18	09:40	+0.01	0.0	7.7	8.4	83.9	2	
C-33	04/19/18	09:45	0.00	0.0	5.8	11.4	82.8	3	

SCS SIGNATURE: Saulo Diaz

LEA SIGNATURE _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: A ROMO			TEMPERATURE: 46			BARO. PRESSURE: 28.06			
GEM SERIAL #: G500390				WEATHER CONDITIONS: CLOUDY					
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10								2	
B-25								2	
C-40								3	
206									
A-10								2	
B-25								2	
C-40								3	
207									
A-10	4-19-18	1022	-.43	0	1.8	19.5	78.7	2	
B-25	4-19-18	1025	-1.40	0	.3	21.0	78.7	2	
C-40	4-19-18	1028	-.01	0	.1	21.2	78.7	3	
208									
A-9.1	4-19-18	1008	-.13	0	8.6	11.0	80.4	2	
B-25	4-19-18	1010	-.14	0	11.1	10.4	78.5	2	
C-40	4-19-18	1013	-.26	0	9.3	11.9	78.8	3	
210									
A-10	4-19-18	834	-.91	0	.2	21.6	78.2	2	
B-25	4-19-18	837	-.96	0	.2	21.5	78.3	2	
C-39	4-19-18	840	-.43	0	.1	21.6	78.3	3	
242									
C-42	4-19-18	855	-.19	0	3.2	16.0	80.8	3	
D-60	4-19-18	858	-.18	0	7.3	5.0	87.7	4	
E-78	4-19-18	902	-.46	0	5.3	10.7	84.0	4	
243									
A-11								2	
B-20								2	
C-33								3	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

SAULO DIAZ GEM G504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11								2	
B-21								2	
C-36								3	
245									
A-11	04/19/18	08:35	-0.02	0.0	14.0	4.0	82.0	2	
B-20	04/19/18	08:43	-0.01	0.0	25.3	0.4	74.3	2	
C-35	04/19/18	08:48	-0.01	0.0	22.8	0.3	76.9	3	
D-50	04/19/18	08:54	-0.03	0.0	18.7	0.4	80.9	4	
E-64	04/19/18	09:04	+0.05	0.1	7.4	8.2	84.3	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	04/19/18	09:55	0.00	0.0	8.7	5.6	85.7	2	
B-20	04/19/18	09:59	-0.01	0.4	24.5	0.9	74.2	2	
C-33	04/19/18	10:04	-0.14	0.2	35.3	0.2	64.3	3	
D-48	04/19/18	10:09	-0.10	2.9	43.4	0.0	53.7	4	
E-62	04/19/18	10:15	-0.59	0.9	29.8	0.0	69.3	4	
239									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
240									
A-11								2	
B-20								2	
C-33								3	
D-49								4	
E-61								4	

SCS SINGNATURE: Saulo Diaz

LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

A. ROMO GEM # 6500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	4-19-18	932	-.25	.0	17.6	.1	82.3	2	
B-21	4-19-18	935	-.23	.2	16.5	5.1	78.2	2	
C-36	4-19-18	938	-.47	.0	5.9	16.0	78.1	3	
245									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11								2	
B-20								2	
C-33								3	
D-48								4	
E-62								4	
239									
A-11	4-19-18	807	-.21	.0	15.5	9.1	75.4	2	
B-20	4-19-18	810	-.22	.0	.1	22.0	77.9	2	
C-35	4-19-18	813	+1.11	.0	.1	22.1	77.8	3	
D-50	4-19-18	817	-.20	.0	.1	22.2	77.7	4	
E-64	4-19-18	822	-.19	.0	.1	22.2	77.7	4	
240									
A-11	4-19-18	737	-.23	.0	15.8	7.3	76.9	2	
B-20	4-19-18	740	-15.26	.0	.3	21.2	78.5	2	
C-33	4-19-18	743	-.18	.0	.1	21.5	78.4	3	
D-49	4-19-18	747	-.22	.0	.1	21.7	78.2	4	
E-61	4-19-18	752	-.21	.2	.1	21.8	77.9	4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

SAULO DIAZ GEM G504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
VADOSE									
ZONE									
PV203D	04/19/18	09:23	-5.34	0.0	0.1	20.8	79.1		
PV204D	4/19/18	10:33	-1.71	0.0	0.1	21.2	78.7		
			-3.68						
PV211D	04/19/18	09:14	~~0.0~~ (-3.68)	0.0	0.1	20.9	79.0		

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: A Romo | TEMPERATURE: 62 | BARO. PRESSURE: 28.51

GEM SERIAL #: G500791 | WEATHER CONDITIONS: cloudy

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	5-22-18	817	-.01	0	.6	19.8	79.6	2	
B-29	5-22-18	820	-.06	0	.1	20.7	79.2	2	
C-45	5-22-18	823	-.07	0	.1	20.8	79.1	3	
D-61	5-22-18	827	-.53	0	.1	20.9	79.0	4	
E-77	5-22-18	831	-13.20	0	.1	21.1	78.8	4	
214									
A-13	5-22-18	842	-.05	0	7.5	11.9	80.6	2	
B-30	5-22-18	845	-10.48	0	.1	21.0	78.9	2	
C-48	5-22-18	847	-14.20	0	.1	20.9	79.0	3	
215									
A-13	5-22-18	855	+.04	0	4.7	9.5	85.8	2	
B-30	5-22-18	858	-.01	0	.1	20.8	79.1	2	
C-47	5-22-18	901	+.07	0	.1	20.8	79.1	3	
D-64	5-22-18	904	-.04	0	.2	20.6	79.2	4	
E-81	5-22-18	909	+.02	0	2.8	14.1	83.1	4	
216									
A-14	5-18-22	921	+.01	0	.1	20.9	79.0	2	
B-43	5-18-22	924	+.04	0	.1	20.9	79.0	2	
C-62	5-18-22	927	+.02	0	.1	21.0	78.9	3	
D-86	5-18-22	931	+.04	0	.1	21.1	78.8	4	
E-110	5-18-22	935	+.02	0	.3	20.8	78.9	4	
217									
A-13	5-22-18	948	0	0	5.5	15.0	79.5	2	
B-30	5-22-18	950	+.01	0	4.3	17.0	78.7	2	
218R									
A-11	5-22-18	959	+.04	.1	24.0	1.9	74.0	2	
B-26.5	5-22-18	1002	0	0	21.2	4.6	74.2	2	
B-30	5-22-18	1004	-.40	0	2.2	20.3	77.5	2	
219									
A-13	5-22-18	1015	+.02	0	2.2	18.0	79.8	2	
B-64	5-22-18	1022	+.04	0	3.4	13.3	83.3	2	
C-115	5-22-18	1025	+.64	0	.1	20.8	79.1	3	
D-166	5-22-18	1029	+13	0	.3	20.3	79.4	4	
E-217	5-22-18	1034	+.07	0	4.0	11.2	84.8	4	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM 504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	05/22/18	08:30	-.01	0.0	4.3	16.7	79.0	2	
B-40	05/22/18	08:33	-0.01	0.0	1.6	19.3	79.1	2	
C-87	05/22/18	08:37	-0.00	0.0	0.1	20.7	79.2	3	
D-124	05/22/18	08:43	-0.02	0.0	0.3	20.4	79.3	4	
E-158	05/22/18	08:50	-0.04	0.7	5.0	10.7	83.6	4	
220B									
A-14	05/22/18	09:00	+0.01	0.0	3.8	16.0	80.2	2	
B-38	05/22/18	09:04	-0.06	0.0	1.1	19.0	79.9	2	
C-62	05/22/18	09:09	-0.21	0.0	6.0	10.7	83.3	3	
D-86	05/22/18	09:17	-0.12	0.0	5.9	11.1	83.0	4	
E-110	05/22/18	09:24	-0.12	0.0	6.9	5.3	87.8	4	
221									
A-13	05/22/18	09:34	+0.03	0.0	1.4	19.3	79.3	2	
B-56	05/22/18	09:38	-0.02	0.0	0.7	20.0	79.3	2	
C-99	05/22/18	09:43	-0.10	0.0	1.0	20.1	78.9	3	
D-142	05/22/18	09:49	-0.02	0.0	0.0	21.1	78.9	4	
E-185	05/22/18	09:55	0.00	0.0	0.0	20.9	79.1	4	
222									
A-13	05/22/18	10:03	+0.01	0.0	2.1	19.0	78.9	2	
B-54.8	05/22/18	10:06	-0.02	0.0	0.0	21.0	79.0	2	
C-96.5	05/22/18	10:11	+0.01	0.0	0.1	20.9	79.0	3	
D-138.3	05/22/18	10:16	-0.01	0.0	3.5	16.4	80.1	4	
E-180	05/22/18	~~10:18~~ 10:22	-0.03	0.0	0.1	20.8	79.1	4	
223									
A-13	05/22/18	10:35	-0.03	0.0	6.8	8.2	85.0	2	
B-37.5	05/22/18	10:38	+0.02	0.0	8.4	3.5	88.1	2	
C-62	05/22/18	10:43	-0.04	0.0	5.9	10.8	83.3	3	
D-86.5	05/22/18	10:49	-0.01	0.0	2.8	16.6	80.6	4	
E-111	05/22/18	10:54	+0.01	0.0	4.9	11.7	83.4	4	
224									
A-13	05/22/18	11:06	-0.01	0.0	0.6	20.4	79.0	2	
B-67.5	05/22/18	11:11	-0.01	0.0	0.0	21.0	79.0	2	
C-122	05/22/18	11:15	-0.04	0.0	0.0	21.0	79.0	3	
D-177.5	05/22/18	11:21	-12.24	0.0	0.0	21.0	79.0	4	
E-232	05/22/18	11:28	-8.67	0.0	0.0	21.0	79.0	4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM 504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	05/22/18	13:42	-0.10	0.0	1.5	19.4	79.1	2	
B-72	05/22/18	13:47	-5.08	0.0	0.6	20.1	79.3	2	
C-1131	05/22/18	13:51	-9.67	0.0	1.9	19.0	79.1	3	
D-190	05/22/18	13:56	-10.01	0.0	0.1	20.5	79.4	4	
E-244	05/22/18	14:02	-9.41	0.0	1.3	19.3	79.4	4	
226									
A-13	05/22/18	14:14	0.00	0.0	0.0	20.7	79.3	2	
B-64	05/22/18	14:18	-11.85	0.0	0.0	20.7	79.3	23	
C-114	05/22/18	14:24	-11.14	0.0	0.0	21.1	78.9	3	
D-164	05/22/18	14:32	-11.90	0.0	0.0	21.2	78.8	4	
E-208	05/22/18	14:39	-11.94	0.0	0.1	20.9	79.0	4	
227									
A-13								2	
B-48.7								2	
C-84.4								3	
D-114								4	
E-115.7								4	
228									
A-13								2	
B-63								2	
C-113								3	
D-163								4	
E-213								4	
229									
A-13								2	
B-48.7								2	
C-84.4								3	
D-114								4	
E-155.7								4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: Sandy Da

LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

A. ROMO GEM G500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13								2	
B-72								2	
C-1131								3	
D-190								4	
E-244								4	
226									
A-13								2	
B-64								23	
C-114								3	
D-164								4	
E-208								4	
227									
A-13	5-22-18	1430	+.24	0	2.6	10.0	87.4	2	
B-48.7	5-22-18	1432	+.20	0	.1	9.0	90.9	2	
C-84.4	5-22-18	1435	+.23	.1	5.2	1.8	92.9	3	
D-114	5-22-18	1439	+.25	.1	4.5	.6	94.8	4	
E-115.7	5-22-18	1443	+.25	0	4.8	2.3	92.9	4	
228									
A-13	5-22-18	1407	+.13	.1	2.7	9.8	87.4	2	
B-63	5-22-18	1411	+.08	0	.1	20.4	79.5	2	
C-113	5-22-18	1416	+.42	.1	5.3	1.6	93.0	3	
D-163	5-22-18	1420	+.43	0	.3	9.8	89.9	4	
E-213	5-22-18	1425	+.33	0	4.8	2.1	93.1	4	
229									
A-13	5-22-18	1052	-.71	0	.5	19.2	80.3	2	
B-48.7	5-22-18	1055	-12.25	0	.1	20.6	79.3	2	
C-84.4	5-22-18	1058	-13.92	0	.1	20.6	79.3	3	
D-114	5-22-18	1102	-15.85	0	.3	20.2	79.5	4	
E-155.7	5-22-18	1107	-23.97	0	0	21.0	79.0	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

A. Romo GEM 500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
241									
A-13	5-22-18	744	-14.98	.1	.1	21.2	78.6	2	
B-28	5-22-18	747	-7.00	0	.1	21.2	78.7	2	
C-47	5-22-18	750	-.06	.0	.1	21.3	78.6	3	
D-64	5-22-18	757	-.05	0	.1	20.9	79.0	4	
E-85	5-22-18	803	-9.13	0	.1	20.8	79.1	4	

SCS SIGNATURE:_____ LEA SIGNATURE:_____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: Saulo Diaz			TEMPERATURE: 60°F			BARO. PRESSURE: 30.1"		
GEM SERIAL #: 9504643			WEATHER CONDITIONS: Cloudy					
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10	05/24/18	08:27	-0.04	0.0	4.0	17.6	78.4	2	
B-25	05/24/18	08:30	-0.03	0.0	4.9	16.1	79.0	2	
C-40	05/24/18	08:36	0.00	0.0	4.2	16.7	79.1	3	
206									
A-10	05/24/18	07:22	-0.01	0.0	10.1	13.1	76.8	2	
B-25	05/24/18	07:26	-0.02	0.0	13.6	10.2	76.2	2	
C-40	05/24/18	07:30	-0.01	0.0	20.1	5.4	74.5	3	
207									
A-10	05/24/18	10:39	-0.31	0.0	2.4	19.2	78.4	2	
B-25	05/24/18	10:43	-2.57	0.0	0.5	20.5	79.0	2	
C-40	05/24/18	10:47	-0.25	0.0	0.1	21.0	78.9	3	
208									
A-9.1								2	
B-25								2	
C-40								3	
210									
A-10								2	
B-25								2	
C-39								3	
242									
C-42								3	
D-60								4	
E-78								4	
243									
A-11	05/24/18	09:53	-0.02	0.0	13.0	0.4	86.6	2	
B-20	05/24/18	09:57	+0.02	0.0	6.7	11.4	81.9	2	
C-33	05/24/18	10:02	+0.01	0.0	5.0	14.4	80.6	3	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: A ROMO | TEMPERATURE: 55 | BARO. PRESSURE: 28.14

GEM SERIAL #: G500390 | WEATHER CONDITIONS: cloudy

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10								2	
B-25								2	
C-40								3	
206									
A-10								2	
B-25								2	
C-40								3	
207									
A-10								2	
B-25								2	
C-40								3	
208									
A-9.1	5-24-18	954	+.08	0	1.6	20.3	78.1	2	
B-25	5-24-18	957	-.02	0	12.4	9.2	78.4	2	
C-40	5-24-18	000	-.01	0	2.8	18.0	79.2	3	
210									
A-10	5-24-18	841	-.62	0	.1	21.7	78.2	2	
B-25	5-24-18	844	-.70	0	.1	21.1	78.3	2	
C-39	5-24-18	847	-.30	0	.1	21.6	78.3	3	
242									
C-42	5-24-18	857	-.07	0	3.3	16.2	80.5	3	
D-60	5-24-18	901	-.04	0	.4	16.0	83.6	4	
E-78	5-24-18	906	+.03	0	5.1	10.0	84.4	4	
243									
A-11								2	
B-20								2	
C-33								3	

SCS SIGNATURE: _____

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

A. Romo GEM 500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	5-24-18	934	-.18	.1	14.8	3.9	81.2	2	
B-21	5-24-18	938	+.03	.2	19.1	.9	79.8	2	
C-36	5-24-18	944	-.01	Ø	9.7	12.5	77.8	3	
245									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11								2	
B-20								2	
C-33								3	
D-48								4	
E-62								4	
239									
A-11	5-24-18	813	-.08	Ø	13.3	12.1	74.6	2	
B-20	5-24-18	816	Ø	Ø	.1	21.6	78.3	2	
C-35	5-24-18	820	-.05	Ø	.1	21.6	78.3	3	
D-50	5-24-18	823	-.04	Ø	.1	21.7	78.2	4	
E-64	5-24-18	828	+.03	Ø	.1	21.8	78.1	4	
240									
A-11	5-24-18	749	-.24	Ø	5.9	15.5	78.6	2	
B-20	5-24-18	752	-.01	Ø	.2	20.9	78.9	2	
C-33	5-24-18	754	+.15	Ø	.1	21.1	78.8	3	
D-49	5-24-18	758	-.05	Ø	.1	21.3	78.6	4	
E-61	5-24-18	803	+.01	.2	.1	21.4	78.3	4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM 504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11								2	
B-21								2	
C-36								3	
245									
A-11	05/24/18	08:55	0.00	0.0	12.8	6.1	81.1	2	
B-20	05/24/18	08:59	+0.01	0.0	22.4	0.8	76.8	2	
C-35	05/24/18	09:04	-0.04	0.0	22.3	0.5	77.2	3	
D-50	05/24/18	09:10	-0.04	0.0	18.2	0.6	81.2	4	
E-64	05/24/18	09:15	-0.01	0.0	0.2	20.6	79.2	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	05/24/18	07:41	+0.01	0.0	9.6	10.8	79.6	2	
B-20	05/24/18	07:47	-0.18	0.7	28.1	1.1	70.1	2	
C-33	05/24/18	07:51	-0.41	2.0	40.6	0.0	57.4	3	
D-48	05/24/18	07:58	-0.10	3.1	44.0	0.0	52.9	4	
E-62	05/24/18	08:04	-0.24	2.0	37.2	0.0	60.8	4	
239									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
240									
A-11								2	
B-20								2	
C-33								3	
D-49								4	
E-61								4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM 504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
VADOSE									
ZONE									
PV203D	05/24/18	09:36	-4.06	0.0	0.1	20.9	79.0		
PV204D	05/24/18	10:52	-2.85	0.0	0.5	20.6	78.9		
PV211D	05/24/18	09:25	-2.49	0.0	0.1	20.8	79.1		

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

TECHNICIAN: ARMO | TEMPERATURE: 66 | BARO. PRESSURE: 28.31

GEM SERIAL #: G500390 | WEATHER CONDITIONS: SUNNY

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
213									
A-13	6-26-18	754	-.21	0	.1	21.0	78.9	2	
B-29	6-26-18	757	-.28	0	.1	21.0	78.9	2	
C-45	6-26-18	800	-.89	0	.1	21.0	78.9	3	
D-61	6-26-18	804	-.91	0	.3	20.6	79.1	4	
E-77	6-26-18	809	-14.15	.1	.1	20.9	78.9	4	
214									
A-13	6-26-18	841	-.20	0	8.4	12.1	79.5	2	
B-30	6-26-18	844	-11.92	0	.1	20.7	79.2	2	
C-48	6-26-18	848	-15.40	0	.8	19.9	79.3	3	
215									
A-13	6-26-18	856	-.11	0	5.1	8.8	86.1	2	
B-30	6-26-18	859	-.08	0	3.5	12.7	83.8	2	
C-47	6-26-18	902	-.08	0	.1	20.7	79.2	3	
D-64	6-26-18	906	-.05	.1	.2	20.4	79.3	4	
E-81	6-26-18	911	-.13	.1	.3	20.5	79.1	4	
216									
A-14	6-26-18	934	-.05	0	.1	20.5	79.4	2	
B-43	6-26-18	936	-.05	0	.1	20.5	79.4	2	
C-62	6-26-18	940	-.01	0	.1	20.4	79.5	3	
D-86	6-26-18	945	+.02	0	.1	20.3	79.4	4	
E-110	6-26-18	949	+.01	0	.1	20.4	79.5	4	
217									
A-13	6-26-18	959	+.01	0	4.0	16.2	79.8	2	
B-30	6-26-18	1001	+.02	0	3.1	17.5	79.4	2	
218R									
A-11	6-26-18	1010	-.05	0	22.8	2.4	74.8	2	
B-26.5	6-26-18	1012	+.03	0	16.8	8.1	75.1	2	
B-30	6-26-18	1015	+.07	0	11.1	17.0	71.9	2	
219									
A-13	6-26-18	1025	+.10	0	1.5	17.9	80.6	2	
B-64	6-26-18	1028	+.10	0	3.2	12.3	84.5	2	
C-115	6-26-18	1031	+.09	0	.4	19.2	80.4	3	
D-166	6-26-18	1034	+.11	0	.1	19.8	80.1	4	
E-217	6-26-18	1038	+.13	0	.2	18.3	81.5	4	

SCS SIGNATURE: _____

LEA SIGNATURE _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM 504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
220									
A-14	06/26/18	07:32	-0.04	0.0	3.5	19.1	77.3	2	
B-40	06/26/18	07:36	-0.08	0.0	0.7	20.7	78.6	2	
C-87	06/26/18	07:41	-0.04	0.0	0.9	20.6	78.5	3	
D-124	06/26/18	07:47	-0.04	0.0	0.2	20.8	79.0	4	
E-158	06/26/18	07:52	-0.05	0.0	0.4	20.6	79.0	4	
220B									
A-14	06/26/18	08:07	-0.01	0.0	4.0	16.5	79.5	2	
B-38	06/26/18	08:11	-0.06	0.0	0.9	19.8	79.3	2	
C-62	06/26/18	08:15	-0.14	0.0	5.6	12.9	81.5	3	
D-86	06/26/18	08:20	-0.14	0.0	5.9	12.1	82.0	4	
E-110	06/26/18	08:25	-0.17	0.0	4.3	15.4	80.3	4	
221									
A-13	06/26/18	08:38	-0.01	0.0	1.0	20.2	78.8	2	
B-56	06/26/18	08:43	-0.01	0.0	5.6	12.1	82.3	2	
C-99	06/26/18	08:51	-0.25	0.0	0.5	19.7	79.8	3	
D-142	06/26/18	08:57	-0.18	0.0	0.0	19.8	80.2	4	
E-185	06/26/18	09:05	-0.01	0.0	0.0	20.7	79.3	4	
222									
A-13	06/26/18	09:11	-0.02	0.0	1.5	19.1	79.4	2	
B-54.8	06/26/18	09:14	-0.05	0.0	0.0	20.7	79.3	2	
C-96.5	06/26/18	09:18	-0.01	0.1	0.1	20.9	78.9	3	
D-138.3	06/26/18	09:25	-0.04	0.0	2.3	18.8	78.9	4	
E-180	06/26/18	09:30	-0.05	0.0	0.1	21.4	78.5	4	
223 (SP)	~~06/26/18~~	~~09:40~~	~~-0.04~~						
A-13	06/26/18	09:40	-0.04	0.0	6.8	8.4	84.8	2	
B-37.5	06/26/18	09:43	-0.02	0.0	8.4	3.0	88.6	2	
C-62	06/26/18	09:48	-0.05	0.0	6.9	8.7	84.4	3	
D-86.5	06/26/18	09:54	-0.08	0.0	2.5	16.7	80.8	4	
E-111	06/26/18	09:58	-0.05	0.0	4.5	12.1	83.4	4	
224									
A-13	06/26/18	10:07	-0.12	0.0	0.8	20.0	79.2	2	
B-67.5	06/26/18	10:11	-0.07	0.0	0.0	20.9	79.1	2	
C-122	06/26/18	10:15	-0.12	0.0	0.0	21.1	78.9	3	
D-177.5	06/26/18	10:21	-12.68	0.0	0.0	21.1	78.9	4	
E-232	06/26/18	10:30	-9.48	0.0	0.0	21.0	79.0	4	

SCS SINGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

S. DIAZ GEM 504 693

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13	06/26/18	10:47	-0.03	0.0	1.1	19.5	79.4	2	
B-72	06/26/18	10:50	-5.85	0.0	0.5	20.1	79.4	2	
C-1131	06/26/18	10:54	-10.66	0.0	1.4	19.2	79.4	3	
D-190	06/26/18	10:59	-10.82	0.0	0.0	20.6	79.4	4	
E-244	06/26/18	11:04	-10.15	0.0	1.0	19.5	79.5	4	
226									
A-13	06/26/18	13:41	+0.03	0.0	0.0	20.8	79.2	2	
B-64	06/26/18	13:44	-11.49	0.0	0.0	20.5	79.5	2	
C-114	06/26/18	13:48	-11.24	0.0	0.0	20.5	79.5	3	
D-164	06/26/18	13:54	-11.84	0.0	0.0	20.7	79.3	4	
E-208	06/26/18	14:00	-12.28	0.0	0.1	20.6	79.3	4	
227									
A-13	06/26/18	14:08	-0.03	0.0	0.2	20.1	79.7	2	
B-48.7	06/26/18	14:11	-0.58	0.0	0.1	20.3	79.6	2	
C-84.4	06/26/18	14:15	-0.74	0.0	0.3	20.1	79.6	3	
D-114	06/26/18	14:20	-0.95	0.0	0.3	20.2	79.5	4	
E-115.7	06/26/18	14:27	-0.54	0.0	0.1	20.2	79.7	4	
228									
A-13								2	
B-63								2	
C-113								3	
D-163								4	
E-213								4	
229									
A-13								2	
B-48.7								2	
C-84.4								3	
D-114								4	
E-155.7								4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - CITY PERIMETER PROBE MONITORING DATA

A. ROMO GEM500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
225									
A-13								2	
B-72								2	
C-1131								3	
D-190								4	
E-244								4	
226									
A-13								2	
B-64								23	
C-114								3	
D-164								4	
E-208								4	
227									
A-13								2	
B-48.7								2	
C-84.4								3	
D-114								4	
E-115.7								4	
228									
A-13	6-26-18	1406	+.12	Ø	.7	19.3	80.0	2	
B-63	6-26-18	1408	-.26	Ø	2.9	13.1	84.0	2	
C-113	6-26-18	1411	-.17	Ø	.1	20.3	79.6	3	
D-163	6-26-18	1415	-.36	Ø	.3	20.1	79.6	4	
E-213	6-26-18	1419	-.34	Ø	1.4	17.3	81.3	4	
229									
A-13	6-26-18	1333	-.83	Ø	.6	18.8	80.6	2	
B-48.7	6-26-18	1336	-11.84	Ø	.3	19.7	80.0	2	
C-84.4	6-26-18	1338	-12.85	Ø	.1	20.4	79.5	3	
D-114	6-26-18	1341	-15.19	.1	.4	19.3	80.2	4	
E-155.7	6-26-18	1346	-23.42	.1	Ø	20.7	79.2	4	
230									
A-16								2	REMOVED DUE TO CONSTRUCTION
B-33								2	REMOVED DUE TO CONSTRUCTION
C-50								3	REMOVED DUE TO CONSTRUCTION
231									
A-13								2	REMOVED DUE TO CONSTRUCTION
B-26								2	REMOVED DUE TO CONSTRUCTION
C-39								3	REMOVED DUE TO CONSTRUCTION
D-51								4	REMOVED DUE TO CONSTRUCTION
E-66								4	REMOVED DUE TO CONSTRUCTION

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON CITY PERIMETER PROBE MONITORING DATA

A. ROMO GEM 500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
241									
A-13	6-26-18	730	-.46	0	2.6	17.3	80.1	2	
B-28	6-26-18	733	-.33	0	.1	20.6	79.3	2	
C-47	6-26-18	736	-1.52	0	.1	20.7	79.2	3	
D-64	6-26-18	740	-1.13	0	.1	20.8	79.1	4	
E-85	6-26-18	746	-14.13	0	.1	20.9	79.0	4	

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: Saulo DIAZ			TEMPERATURE: 71°F			BARO. PRESSURE: 29.9"			
GEM SERIAL #: G504643				WEATHER CONDITIONS: Sunny & Clear					
PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203	06/28/18								
A-10	06/28/18	08:48	+0.01	0.0	3.7	17.5	78.8	2	
B-25	06/28/18	08:51	-0.03	0.0	4.5	16.2	79.3	2	
C-40	06/28/18	08:55	-0.04	0.0	4.2	16.3	79.5	3	
206									
A-10	06/28/18	07:28	+0.02	0.0	11.1	10.8	78.1	2	
B-25	06/28/18	07:31	+0.01	0.0	14.2	8.2	77.6	2	
C-40	06/28/18	07:35	-0.02	0.0	21.8	3.7	74.5	3	
207									
A-10								2	
B-25								2	
C-40								3	
208									
A-9.1								2	
B-25								2	
C-40								3	
210									
A-10								2	
B-25								2	
C-39								3	
242									
C-42								3	
D-60								4	
E-78								4	
243									
A-11	06/28/18	09:53	0.00	0.2	13.0	0.2	86.6	2	
B-20	06/28/18	09:57	-0.01	0.0	8.4	7.0	84.6	2	
C-33	06/28/18	10:01	-0.02	0.0	6.5	10.1	83.4	3	

SCS SIGNATURE: _____ LEA SIGNATURE _____

SUNSHINE CANYON COUNTY PERIMETER PROBE MONITORING DATA

TECHNICIAN: ARMS | TEMPERATURE: 66 | BARO. PRESSURE: 28.14

GEM SERIAL #: G50039 | WEATHER CONDITIONS: SUNNY

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% CH4	% CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
202									
A-10								2	REMOVED DUE TO CONSTRUCTION
B-25								2	REMOVED DUE TO CONSTRUCTION
C-38								3	REMOVED DUE TO CONSTRUCTION
203									
A-10								2	
B-25								2	
C-40								3	
206									
A-10								2	
B-25								2	
C-40								3	
207									
A-10	6.28.18	945	-.18	0	.1	20.0	79.9	2	
B-25	6.28.18	947	+.34	0	.2	20.1	79.7	2	
C-40	6.28.18	949	+.32	0	.1	20.0	79.9	3	
208									
A-9.1	6.28.18	928	+.20	0	2.5	18.5	79.0	2	
B-25	6.28.18	930	+.21	0	10.5	11.1	78.4	2	
C-40	6.28.18	931	+.21	0	1.7	12.8	80.5	3	
210									
A-10	6.28.18	831	-.49	0	.1	20.8	79.1	2	
B-25	6.28.18	833	-.38	0	.1	20.8	79.1	2	
C-39	6.28.18	835	+.10	0	.1	20.8	79.1	3	
242									
C-42	6.28.18	843	+.05	0	2.9	17.1	80.0	3	
D-60	6.28.18	846	+.11	0	6.1	7.5	86.4	4	
E-78	6.28.18	851	-.22	0	4.9	12.9	82.2	4	
243									
A-11								2	
B-20								2	
C-33								3	

SCS SIGNATURE: _____

LEA SIGNATURE _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

A. ROMO GEM G500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11	6.28.18	901	+.09	Ø	19.0	.8	82.2	2	
B-21	6.28.18	903	+.14	.1	14.0	6.8	79.1	2	
C-36	6.28.18	906	+.16	Ø	9.5	12.4	78.1	3	
245									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11								2	
B-20								2	
C-33								3	
D-48								4	
E-62								4	
239									
A-11	6.28.18	808	+.01	.1	15.1	11.6	73.2	2	
B-20	6.28.18	812	Ø	Ø	.1	21.0	78.9	2	
C-35	6.28.18	814	+.03	Ø	.1	21.0	78.9	3	
D-50	6.28.18	817	Ø	Ø	.1	21.1	78.2	4	
E-64	6.28.18	821	+.01	Ø	.1	21.1	78.8	4	
240									
A-11	6.28.18	737	-.04	Ø	11.0	11.5	77.5	2	
B-20	6.28.18	739	-.31	Ø	.3	20.8	78.9	2	
C-33	6.28.18	741	-.41	Ø	.1	21.0	78.9	3	
D-49	6.28.18	744	-.74	Ø	.1	21.1	78.8	4	
E-61	6.28.18	755	-.21	.2	.1	21.1	78.6	4	

SCS SINGNATURE: _____

LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

Sandy Diaz G504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
244									
A-11								2	
B-21								2	
C-36								3	
245									
A-11	06/28/18	09:05	-0.06	0.0	14.7	3.9	81.4	2	
B-20	06/28/18	09:09	-0.06	0.0	24.3	0.3	75.4	2	
C-35	06/28/18	09:15	-0.07	0.0	22.2	0.3	77.5	3	
D-50	06/28/18	09:19	-0.08	0.0	17.4	1.0	81.6	4	
E-64	06/28/18	09:25	-0.02	0.0	9.4	3.7	86.9	4	
246									
A-9								2	REMOVED DUE TO CONSTRUCTION
B-16								2	REMOVED DUE TO CONSTRUCTION
205R									
A-11	06/28/18	07:57	-0.03	0.0	9.6	12.1	78.3	2	
B-20	06/28/18	08:01	-0.09	0.7	25.8	2.5	71.0	2	
C-33	06/28/18	08:06	-0.25	1.9	40.0	0.2	57.9	3	
D-48	06/28/18	08:11	-0.14	3.0	43.3	0.0	53.7	4	
E-62	06/28/18	08:17	-0.27	1.8	35.5	0.0	62.7	4	
239									
A-11								2	
B-20								2	
C-35								3	
D-50								4	
E-64								4	
240									
A-11								2	
B-20								2	
C-33								3	
D-49								4	
E-61								4	

SCS SINGNATURE: Sandy R

LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

Saulo Diaz 6504643

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
VADOSE									
ZONE									
PV203D	06/28/18	09:38	-3.68	0.0	0.0	20.8	79.2		
PV204D									
PV211D	06/28/18	09:31	-2.10	0.0	0.1	20.6	79.3		

SCS SIGNATURE: _____ LEA SIGNATURE: _____

SUNSHINE CANYON - COUNTY PERIMETER PROBE MONITORING DATA

A. ROMO GEM G500390

PROBE NUMBER	DATE	TIME	PRESSURE (+/-)	% VOL CH4	% VOL CO2	% O2	% BAL	PURGE TIME (MIN)	COMMENTS
VADOSE									
ZONE									
PV203D									
PV204D	6.28.18	953	-2.72	0	.1	20.1	79.8	1	
PV211D									

SCS SIGNATURE: _____ LEA SIGNATURE: _____

APPENDIX D

NPDES CERTIFICATION OF COMPLETION

SUNSHINE CANYON
Landfill

14747 San Fernando Road
Sylmar, CA 91342

August 15, 2018

Operating Records
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

Please be advised that all standard observations for the landfill were done in accordance with the NPDES monitoring and reporting requirements. Records of observations are kept at the Sunshine Canyon Landfill's Operating Records and are submitted to the RWQCB in the storm water table due annually by July 1st.

Sincerely,

Chris Coyle
General Manager
Sunshine Canyon Landfill

APPENDIX E

WASTE PLACEMENT AREAS
FIRST SEMIANNUAL 2018 MONITORING PERIOD

Geo-Logic ASSOCIATES

NORTH

GRAPHIC SCALE

500' 0' 250' 500' 1000' 2000'

LEGEND

- 1500 EXISTING 10 FT CONTOUR
- PROPERTY BOUNDARY
- CITY/COUNTY LIMIT
- APPROVED LIMITS OF REFUSE PER 2002 JTD
- PERMIT LINER LIMIT

FOR_REVIEW_ONLY

EXISTING TOPOGRAPHY PREPARED BY COOPER AERIAL SURVEYS DATED FEBRUARY 5, 2018

REV. NO.	DATE	DESCRIPTION	APPROVED BY
REV1	DATE1	DESCRIPTION	DRAWN1
REV2	DATE2	DESCRIPTION2	DRAWN2
REV3	DATE3	DESCRIPTION3	DRAWN3
REV4	DATE4	DESCRIPTION4	DRAWN4
REV5	DATE5	DESCRIPTION5	DRAWN5
REV6	DATE6	DESCRIPTION6	DRAWN6

DATE OF ISSUE: AUGUST 2018
DESIGNED BY: C BARRETT
DRAWN BY: C BARRETT
CHECKED BY: R JOHNSON
APPROVED BY: R JOHNSON

DIGALERT 811

Geo-Logic ASSOCIATES
2777 E. GUASTI RD.
ONTARIO, CA 91761
909) 626-2282
www.geo-logic.com

REPUBLIC SERVICES

SUNSHINE CANYON LANDFILL
SYLMAR, CALIFORNIA
SEMIANNUAL GROUNDWATER MONITORING REPORT

DISPOSAL AREAS - JANUARY 2018 - JUNE 2018

DWG NO. 1

PROJECT NO. SO18.0100.00

C:\Users\cbarrett\Documents\Allied-Republic\Sunshine Canyon LF\Exhibits\Semi-annual Report\DWG SETS\SO18.0100-SCL-2018H1-SMI-ANNUAL REPORT.dwg Aug 15, 2018 - 7:8pm By: cbarrett

APPENDIX F

WASTE ACCEPTANCE REPORTS

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123153583	3/5/2019	

I. Decision Request: ☐ Initial ☑ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Medical Waste Services LLC

Generator Site Address: 7321 Quimby Street

City: Paramount **County:** **State:** CA **Zip:**

Name of Waste: Treated Medical Waste Treated APHIS Foreign Garbage FDA Confiscated Materials

Estimated Annual Volume: 2100 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

The generator must comply with all Federal, State and Local regulations regarding Disinfected (Steam Sterilized, Microwaved, Treated) Medical/APHIS Waste.

With each shipment the generator must provide a Certification demonstrating the waste has been autoclaved (Certificate of Treatment).

This material must be buried immediately upon receipt at the landfill.

Special Waste Analyst Signature: **Name (Printed):** MARK PHILLIPS

Date: 1/9/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Cayle

Date: 1/9/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed

Disposal Facility:	5123 Sunshine Canyon LF CA	Waste Profile #	5123 15 3583

I. Generator Information

Generator Name: Medical Waste Services, LLC			
Generator Site Address: 7321 Quimby Street			
City: Paramount	County: Los Angeles	State: California	Zip: 90723
State ID/Reg No:	State Approval/Waste Code:		NAICS #: 56221
Generator Mailing Address (if different): ☐ 7321 Quimby Street			
City: Paramount	County:	State: California	Zip: 90723
Generator Contact Name: Terry Shain		Email: tshain@mws-1.com	
Phone Number: (888) 610-1311		Fax Number: (562) 529-3717	

II. Waste Stream Information

Name of Waste: Treated Medical Waste, Treated APHIS Waste/Foreign Garbage, FDA Confiscated Materials

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

Terry Shain Vice President, Operations	Medical Waste Services, LLC
Authorized Representative Name And Title (Printed)	Company Name
Authorized Representative Signature	1/9/2018 Date

April 2013

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

Waste Profile #	Expiration Date
5123156511	4/8/2021

I. Decision Request: ☐ Initial ☑ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Los Angeles County Metropolitan Transportation Authority

Generator Site Address: Long Beach Yard - 4350 208th St Long Beach

City: Los Angeles **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 25 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of TWW must be in accordance with the California Health and Safety Code (HSC) sections 24143.1.5, 25150.7 and 25150.8.

Special Waste Analyst Signature: _____ **Name (Printed):** Suzanne Glass

Date: 4/5/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Coyle

Date: 4/5/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Waste Profile #
5123156511

Disposal Facility: 5123 Sunshine Canyon LF CA

I. Generator Information

Generator Name: Los Angeles County Metropolitan Transportation Authority - Long Beach Yard			
Generator Site Address: 4350 208th Street			
City: Long Beach	County:	State: California	Zip: 90805
State ID/Reg No:	State Approval/Waste Code:		NAICS #:
Generator Mailing Address (if different): ☐ 4350 208th Street			
City: Long Beach	County:	State: California	Zip: 90805
Generator Contact Name: Mark McKendrick		Email:	
Phone Number: (323) 563-9440		Fax Number:	

II. Waste Stream Information

Name of Waste: Weathered Wood Waste

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

Alberto Garcia - Facilities Maintenance Supervisor
Authorized Representative Name And Title (Printed)

Authorized Representative Signature

Los Angeles County Metropolitan Transportation Au
Company Name

4-5-2018
Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123158191	5/15/2021	

I. Decision Request: ☐ Initial ☑ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: California Department of Food and Agriculture

Generator Site Address: Los Angeles County

City: Los Angeles **County:** **State:** CA **Zip:**

Name of Waste: Food Products

Estimated Annual Volume: 5 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: 

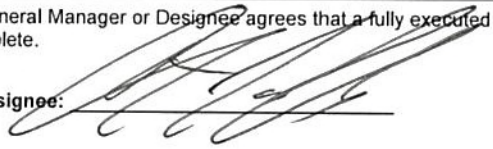
Name (Printed): KEITH DIAMANTI

Date: 5/15/2018

III. Facility Decision: ☐ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: 

Name (Printed): 

Date: 5/15/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Disposal Facility:	5123 Sunshine Canyon LF CA	Waste Profile #	5123 15 8191

I. Generator Information

Generator Name: California Department of Food and Agriculture			
Generator Site Address: Los Angeles County			
City: Los Angeles	County: Los Angeles	State: California	Zip:
State ID/Reg No:	State Approval/Waste Code:		NAICS #:
Generator Mailing Address (if different): ■ 403 W Avenue 33			
City: Los Angeles	County: Los Angeles	State: California	Zip: 90031
Generator Contact Name: George Sanchez		Email: gsanchez@cdfa.ca.gov	
Phone Number: (818) 391-3096		Fax Number:	

II. Waste Stream Information

Name of Waste: Trees and fruit

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ■ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

■ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

George Sanchez/ APCS	California Department of Food and Agriculture
Authorized Representative Name And Title (Printed)	Company Name
Authorized Representative Signature	5/15/2018
	Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123181004	1/18/2021	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: City of Santa Monica

Generator Site Address: 300 Santa Monica Pier

City: Santa Monica **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 120 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of Weathered Wood must be in accordance with California Health and Safety Code (HSC) Sections 25150.7 and 25150.8 (for TWW) or in accordance with HSC Section 25143.5 (for TWW-Utility).

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 1/18/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 1/18/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #
5123 18 1004
Sales Rep #. 525 - Stacy Loveland

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: City of Santa Monica			
Generator Site Address: 300 Santa Monica Pier			
City: Santa Monica	County: Los Angeles	State: California	Zip: 90401
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different): 1685 Main Street			
City: Santa Monica	County: Los Angeles	State: California	Zip: 90401
Generator Contact Name: Randall Martinez		Email: randall.martinez@smgov.net	
Phone Number: (310) 458-8721 Ext:		Fax Number: (310) 393-4425	

II. Billing Information

Bill To: Republic Services - Gardena Hauling		Contact Name: Gabby Munoz	
Billing Address: 14905 South San Pedro		Email: gmunoz@replicservices.com	
City: Gardena	State: CA	Zip: 90248	Phone: (562) 254-6142

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).

☐ Diesel Fuel	☐ Home Heating Fuel #1-6	☐ Kerosene	☐ Aviation Fuel
☐ Hydraulic Fluid	☐ Unleaded Gasoline (UST Corrective Action)		
☑ Weathered Wood	☐ RCRA Empty Containers	☐ Treated Medical Waste	☐ Animal Carcass (non infectious)
☐ Plant Trash	☐ Meth Contaminated Debris		
☐ Friable Asbestos	☐ Non Friable Asbestos	☐ Cured Asphalt	☐ Tires
☐ Food Products (Including Animal Food)			

Process Generating Waste: Removal of weathered treated timber as part of the Santa Monica Pier Rehab Projects.

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: 120 Tons

Frequency: ☐ ONE TIME ☑ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Randall Martinez / Public Works Inspector	City of Santa Monica
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	01/18/2018
	Date

REV 2

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123181098	1/19/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: HMart Logistics Inc

Generator Site Address: 11966 Washington Blvd

City:	County:	State:	Zip:
Whittier		CA	

Name of Waste: Food Products

Estimated Annual Volume: 40 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Liquid bearing food products must be in non-leaking consumer sized containers (small containers similar in size to that normally found in household waste) Per 40 CFR 258.28(b)(1).

This material must be buried immediately upon receipt at the landfill.

Special Waste Analyst Signature: Holly Bradley **Name (Printed):** Holly Bradley

Date: 1/19/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 1/19/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 1098

Sales Rep #: 525 - Stacy Loveland

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: HMart logistics Inc.			
Generator Site Address: 11966 washington blvd			
City: whittier	County: los angeles	State: California	Zip: 90606
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different):			
City:	County:	State: -- Select a State --	Zip:
Generator Contact Name: Ji Song		Email: jiyun.song@hmart.com	
Phone Number: (562) 318-3977 Ext:		Fax Number: (562) 698-5511	

II. Billing Information

Bill To: republic servicese long beach divison		Contact Name: Jaqueline Santana	
Billing Address:		Email:	
City: long beach	State: ca	Zip:	Phone:

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).			
☐ Diesel Fuel	☐ Weathered Wood	☐ Friable Asbestos	
☐ Home Heating Fuel #1-6	☐ RCRA Empty Containers	☐ Non Friable Asbestos	
☐ Kerosene	☐ Treated Medical Waste	☐ Cured Asphalt	
☐ Aviation Fuel	☐ Animal Carcass (non infectious)	☐ Tires	
☐ Hydraulic Fluid	☐ Plant Trash	☑ Food Products (Including Animal Food)	
☐ Unleaded Gasoline (UST Corrective Action)	☐ Meth Contaminated Debris		

Process Generating Waste: Korean snacks and cardboard boxes that housed the bags of chips. record needed for Hmart

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: 40 Cubic Yards

Frequency: ☑ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Ji Song, asset management	HMart logistics Inc.
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	1/19/18
	Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123181307	1/18/2021	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: City of Redondo Beach

Generator Site Address: 121 W Torrance Blvd

City:	County:	State:	Zip:
Redondo Beach		CA	

Name of Waste: Weathered Wood

Estimated Annual Volume: 50 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of TWW must be in accordance with the California Health and Safety Code (HSC) sections 24143.1.5, 25150.7 and 25150.8.

Special Waste Analyst Signature: _____ **Name (Printed):** Suzanne Glass

Date: 1/24/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Cayle

Date: 1/24/2018

REPUBLIC SERVICES

EXPRESS WASTE PROFILE

PRINT

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 1307

Sales Rep #: 525 - Stacy Loveland

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: City of Redondo Beach			
Generator Site Address: 121 W Torrance Blvd			
City: Redondo Beach	County: Los Angeles	State: California	Zip: 90277
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different): ☑ 415 Dimond Street			
City: Redondo Beach	County: Los Angeles	State: California	Zip: 90277
Generator Contact Name: Gary Laolagi		Email: gary.laolagi@redondo.org	
Phone Number: (310) 318-0686 Ext: 4589		Fax Number: (310) 374-4718	

II. Billing Information

Bill To: Republic Services - Gardena Hauling		Contact Name: Gabby Munoz	
Billing Address: 14905 South San Pedro		Email: gmunoz@replicservices.com	
City: Gardena	State: CA	Zip: 90248	Phone: (562) 254-6142

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).

- ☐ Diesel Fuel
- ☐ Home Heating Fuel #1-6
- ☐ Kerosene
- ☐ Aviation Fuel
- ☐ Hydraulic Fluid
- ☐ Unleaded Gasoline (UST Corrective Action)
- ☑ Weathered Wood
- ☐ RCRA Empty Containers
- ☐ Treated Medical Waste
- ☐ Animal Carcass (non infectious)
- ☐ Plant Trash
- ☐ Meth Contaminated Debris
- ☐ Friable Asbestos
- ☐ Non Friable Asbestos
- ☐ Cured Asphalt
- ☐ Tires
- ☐ Food Products (Including Animal Food)

Process Generating Waste: Removal of weathered treated timber as part of the Redondo Beach Pier Project.

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

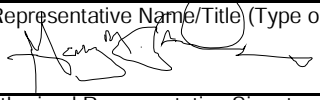
Estimated Annual Volume: 50 Tons

Frequency: ☐ ONE TIME ☑ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Gary Laolagi / Harbor & Pier Maintenance Manager
Authorized Representative Name/Title (Type or Print)



Authorized Representative Signature

City of Redondo Beach
Company Name

01/18/2018
Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123181521	1/29/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: DP Produce Inc

Generator Site Address: 1801 E Washington Blvd

City: Los Angeles	County:	State: CA	Zip:

Name of Waste: Food Products

Estimated Annual Volume: 1500 Pounds

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

This material must be buried immediately upon receipt at the landfill.

Special Waste Analyst Signature:

Date: 1/29/2018

Name (Printed): Holly Bradley

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee:

Date: 1/29/2018

Name (Printed): Chris Coyle

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 1521

Sales Rep #: 525 - Stacy Loveland

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: D.P. Produce Inc			
Generator Site Address: 1801 E Washington Blvd			
City: Los Angeles	County: Los Angeles	State: California	Zip: 90021
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different):			
City:	County:	State: -- Select a State --	Zip:
Generator Contact Name: Nat Kuramarohit		Email:	
Phone Number: 2137471679	Ext:	Fax Number:	

II. Billing Information

Bill To: D.P. Produce Inc		Contact Name: Nat	
Billing Address: 1801 E Washington Blvd		Email:	
City: Los Angeles	State: CA	Zip: 90021	Phone: 2137471679

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).

☐ Diesel Fuel	☐ Weathered Wood	☐ Friable Asbestos
☐ Home Heating Fuel #1-6	☐ RCRA Empty Containers	☐ Non Friable Asbestos
☐ Kerosene	☐ Treated Medical Waste	☐ Cured Asphalt
☐ Aviation Fuel	☐ Animal Carcass (non infectious)	☐ Tires
☐ Hydraulic Fluid	☑ ~~Plant Trash~~ Per NK 1292018	☑ Food Products (Including Animal Food)
☐ Unleaded Gasoline (UST Corrective Action)	☐ Meth Contaminated Debris	

Process Generating Waste: Dumping shipment of fresh produce from Hawaii. LA County AG discovered a insect pest in the shipment

Method of Shipment: ☐ BULK ☐ DRUM ☑ BAGGED ☐ OTHER:

Estimated Annual Volume: 1500 Pounds

Frequency: ☑ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Nat Kuramarohit / President
Authorized Representative Name/Title (Type or Print)

Authorized Representative Signature

D.P. Produce Inc
Company Name

1/29/2018
Date

REV 2

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

FAX

INCOMPLETE FILE TRANSMITTAL

TO: Holly Aasen	**LOG NO.:** 5123181521
FAX:	**File Received:** 1/29/2018
From: Special Waste Dept.	**Response Date:** 1/29/2018
Re: DP Produce Inc / Food Products	

SECTION I	SECTION II	SECTION III	SECTION IV	SECTION V	SECTION VI
☐ DisposalFacility	☐ TransporterName	☑ NameOfWaste	☐ USEPA	☐ CharacteristicComponents	☐ GenAuthSignature
☐ GeneratorName	☐ TransporterSiteAddress	☐ ProcessGeneratingWaste	☐ SampleDate	☐ FreeLiquids	☐ GenCoName
☐ GeneratorSiteAddress	☐ TransporterCityStateZip	☐ TypeOfWaste	☐ CompositeGrab	☐ YesNo	☐ NoStateLetter
☐ GeneratorCityStateZip	☐ TransporterMailingAddress	☐ PhysicalState	☐ SampleID	☐ pH_Flash	☐ Name_Title
☐ GeneratorMailingAddress	☐ TransporterContactName	☐ MethodOfShipment			☐ SignatureDate
☐ GeneratorContactName	☐ TransporterTelFax	☐ EstimatedAnnualVolume			
☐ GeneratorTelFax		☐ Frequency			
☐ GeneratorStateID		☐ DisposalConsideration			
☐ WasteCodeTexas					

ANALYTICALS	TCLP TOTAL METALS	TCLP VOLATILES	TCLP SEMI-VOLATILES	PESTICIDES / HERBICIDE	
☐ TotalCyanide	☐ Arsenic	☐ Benzene	☐ Cresols	☐ Chlordane	☐ LabLetterhead
☐ ReactiveCyanide	☐ Barium	☐ CarbonTetrachloride	☐ DichlorobenzeneOne	☐ Endrin	☐ ChainOfCustody
☐ TotalSulfide	☐ Cadmium	☐ Chlorobenzene	☐ DinitrotolueneTwo	☐ Heptachlor	☐ NoLabSignature
☐ ReactiveSulfide	☐ Chromium	☐ Chloroform	☐ Hexachlorobenzene	☐ HeptachlorEpoxide	☐ ReportOneYearOldPlus
☐ TotalPCB	☐ Copper	☐ DichloroethaneOne	☐ Nitrobenzene	☐ Lindane	☐ NoThirdPartyLab
☐ TOX_EOX	☐ Lead	☐ DichloroehyleneTwo	☐ Pentachlorophenol	☐ Methoxychlor	☐ MissingReportPages
☐ Phenols	☐ Mercury	☐ MethylEthylKetone	☐ Pyridine	☐ Toxaphene	☐ MissingMSDSPages
☐ FlashPoint	☐ Selenium	☐ Tetrachloroethylene	☐ TrichlorophenolFive	☐ TwoFourD	☐ TotalSulfates
☐ pH	☐ Silver	☐ Trichlorethylene	☐ TrichlorphenolSix	☐ TwoFourFiveTP	☐ TotalSulfur
☐ PaintFilter	☐ Zinc	☐ VinylChloride			☐ WrongProfile
☐ TPH					
☐ BTEX					☑ GeneratorIncomplete

Notes:

The generator checked both Plant Trash and Food Products in Section III of the profile. Food products cannot be combined with other waste streams on the Express form. If the waste is both plant trash and food products, please have the generator submit a two page profile for the waste. If the waste is only food products, please have the generator make the necessary corrections to the Express Form (initial and date).

Thank you,
Holly

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123181636	1/30/2021	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Los Angeles County Fire

Generator Site Address: 12605 Osborne St

City: Pacoima **County:** **State:** CA **Zip:**

Name of Waste: Los Angeles Fire Department Fire Fighter Garments

Estimated Annual Volume: 5 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: **Name (Printed):** KEITH DIAMANTI

Date: 1/31/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 1/31/2018

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 1636

Sales Rep #: 525 -Stacy Loveland

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: Los Angeles County Fire			
Generator Site Address: 12605 Osborne St			
City: Pacoima	County: Los Angeles	State: California	Zip: 91331
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☑			
City:	County:	State: – Select a State –	Zip:
Generator Contact Name: Raul Jimenez		Email: raul.jimenez@fire.lacounty.gov	
Phone Number: (818) 625-0802	Ext:	Fax Number:	

II. Billing Information

Bill To: Shred-it Moorpark / STERICYCLE SCS DIVISION		Contact Name: Frank Diaz	
Billing Address: 6100 Condor Dr #B		Email: frank.diaz@stericycle.com	
City: Moorpark	State: Ca	Zip: 93021	Phone: (818) 402-0453

III. Waste Stream Information

Name of Waste: Los Angeles Fire Department Fire Fighter Garments	
Process Generating Waste: Disposal of Used Fire Fighters protective Garments	
Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☐ BULK ☐ DRUM ☐ BAGGED ☑ OTHER: 175 Gl Container
Estimated Annual Volume:	5 TONS (ESTIMATED)
Frequency:	☐ ONE TIME ☑ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification

☑ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Waste Profile #
5123 18 1636

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Fire Turnouts (DECONTAMINATED-UNSAFE FIRE FIGHTER PANTS & JACKETS)	
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
Yellow	Odorless / SMOKE	☐ YES or ☑ NO	100	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Raul Jimenez Property Manager	L.A County Fire Department
Authorized Representative Name And Title (Type or Print)	Company Name
Authorized Representative Signature	1/30/2018
	Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123182301	6/30/2018	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Doreen Colato

Generator Site Address: 20749 Tulsa St

City: Chatsworth **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 40 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of Weathered Wood must be in accordance with California Health and Safety Code (HSC) Sections 25150.7 and 25150.8.

Special Waste Analyst Signature: Joseph L. Sorokach **Name (Printed):** Joseph Sorokach

Date: 2/12/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 2/12/2018

REPUBLIC SERVICES

EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #
5123 18 2301
Sales Rep #. Ed Antolin - 585

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: Doreen Colato			
Generator Site Address: 20749 Tulsa St			
City: Chatsworth	County: Los Angeles	State: California	Zip: 91311
State ID/Reg No: na	State Approval/Waste Code: na (if applicable)		NAICS #.
Generator Mailing Address (if different): 20749 Tulsa St			
City: Chatsworth	County: Chatsworth	State: California	Zip: 91311
Generator Contact Name: Doreen Colato		Email: katcolato@gmail.com	
Phone Number: (818) 201-4942 Ext:		Fax Number:	

II. Billing Information

Bill To: Republic Services		Contact Name: Gabby	
Billing Address:		Email:	
City:	State:	Zip:	Phone:

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).			
☐ Diesel Fuel	☐ Home Heating Fuel #1-6	☐ Kerosene	☐ Aviation Fuel
☐ Hydraulic Fluid	☐ Unleaded Gasoline (UST Corrective Action)		
☑ Weathered Wood	☐ RCRA Empty Containers	☐ Treated Medical Waste	☐ Animal Carcass (non infectious)
☐ Plant Trash	☐ Meth Contaminated Debris		
☐ Friable Asbestos	☐ Non Friable Asbestos	☐ Cured Asphalt	☐ Tires
☐ Food Products (Including Animal Food)			

Process Generating Waste: Railroad ties

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: 40 Cubic Yards

Frequency: ☑ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Doreen Colato	Homeowner
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	2/7/2018
	Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123183849	3/9/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Paradigm Industries Inc

Generator Site Address: 13344 S Main St Ste C

City: Los Angeles **County:** **State:** CA **Zip:**

Name of Waste: Mineral Foam and Gathering of Small Fabrics

Estimated Annual Volume: 60 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: _____ **Name (Printed):** Holly Bradley

Date: 3/9/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Coyle

Date: 3/9/2018

REPUBLIC SERVICES SPECIAL WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 3849

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Sales Rep #: 585 - Ed Antolin

I. Generator Information

Generator Name: PARADIGM INDUSTRIES, INC.			
Generator Site Address: 13344 S Main St. Ste C			
City: Los Angeles	County: USA	State: California	Zip: 90061
State ID/Reg No: GA236157	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☐ 13344 S Main St. Ste C			
City: Los Angeles	County:	State: California	Zip: 90061
Generator Contact Name: Ethan Jung		Email: accounting@paradigmindustries.	
Phone Number: (310) 965-1900	Ext: 104	Fax Number: (310) 798-6900	

II. Billing Information

Bill To: Republic Services Long Beach		Contact Name:	
Billing Address:		Email:	
City:	State:	Zip:	Phone:

III. Waste Stream Information

Name of Waste: Mineral Foam & Gathering of small fabrics	
Process Generating Waste: Waste water used for garment dye are being stored before disposing. Mineral foams are then used to soak up these waste water to filter and clear the water as much as possible before disposing. Small fabrics floating on water are also filtered and gathered during this procedure.	
Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	60 Cubic Yards
Frequency:	☐ ONE TIME ☑ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification

☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☑ GRAB SAMPLE	
Sample Date: 11/20/2017, 12/01/2017	
Sample ID Numbers: Sample ID / Sample Date / Laboratory Name / Laboratory Report# 23311-001 / 11/20/2017 / Orange Coast Analytical, Inc / PDI 23311 23311-001 / 11/20/2017 / Orange Coast Analytical, Inc / PDI 23311A	

Waste Profile #
5123 18 3849

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Mineral Foam	80-90
2. Fabric Threads	10-20
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
Differs	Slight	☐ YES or ☑ NO	100	NA	NA °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Ethan Jung / Accounting Assistant	PARADIGM INDUSTRIES, Inc.
Authorized Representative Name And Title (Type or Print)	Company Name
Authorized Representative Signature	3/8/2018
	Date

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.: 2576
Expiration Date: 2018
Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client:	Paradigm Industries
Laboratory Reference:	PDI 23311
Project Name:	
Project Number:	
Date Received:	11/20/2017
Date Reported:	11/30/2017
Chain of Custody Received:	☑
Analytical Method:	8260B, 8270C, 6010B, 7471A,

Mark Noorani, Laboratory Director

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 22.4ºC.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	11/20/2017	11/20/2017	Solid

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
P-1	23311-001	11/20/2017	11/20/2017	11/22/2017	11/27/2017	Solid

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	Xylenes, Total	1330-20-7	<2.0
1,2-Dichloroethane	107-06-2	<2.5	2-Butanone	78-93-3	<50
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	102	37-139 %
Toluene-d8:	77	54-130 %
4-Bromofluorobenzene:	68	47-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT1122172			11/22/2017	11/27/2017	Soil

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	Xylenes, Total	1330-20-7	<2.0
1,2-Dichloroethane	107-06-2	<2.5	2-Butanone	78-93-3	<50
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	87	37-139 %
Toluene-d8:	82	54-130 %
4-Bromofluorobenzene:	70	47-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Semi Volatile Organics by GC/MS (EPA 8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
P-1	23311-001	11/20/2017	11/20/2017	11/22/2017	11/28/2017	Solid

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
Acenaphthene:	83-32-9	<500	Di-n-octyl phthalate:	117-84-0	<500
Acenaphthylene:	208-96-8	<500	Fluoranthene:	206-44-0	<500
Aniline:	62-53-3	<500	Fluorene:	86-73-7	<500
Anthracene:	120-12-7	<500	Hexachlorobenzene:	118-74-1	<500
Benz(a)anthracene:	56-55-3	<500	Hexachlorobutadiene:	87-68-3	<500
Benzo(b)fluoranthene:	205-99-2	<500	Hexachlorocyclopentadiene:	77-47-4	<2500
Benzo(k)fluoranthene:	207-08-9	<500	Hexachloroethane:	67-72-1	<500
Benzo(g,h,i)perylene:	191-24-2	<500	Indeno(1,2,3-cd)pyrene:	193-39-5	<500
Benzo(a)pyrene:	50-32-8	<500	Isophorone:	78-59-1	<500
Benzyl alcohol:	100-51-6	<500	2-Methylnaphthalene:	91-57-6	<500
bis-(2-chloroethoxy) methane:	111-91-1	<500	2-Methylphenol:	95-48-7	<500
bis-(2-chloroethyl) ether:	111-44-4	<500	3 & 4-Methylphenol:	108-39-4, 106-44-5	<500
bis-(2-chloroisopropyl) ether:	108-60-1	<500	Naphthalene:	91-20-3	<500
bis-(2-ethylhexyl) phthalate:	117-81-7	<500	2-Nitroaniline:	88-74-4	<1300
4-Bromophenyl phenyl ether:	101-55-3	<500	3-Nitroaniline:	99-09-2	<1300
Butyl benzyl phthalate:	85-68-7	<500	4-Nitroaniline:	100-01-6	<1300
4-Chloroaniline:	106-47-8	<500	Nitrobenzene:	98-95-3	<500
2-Chloronaphthalene:	91-58-7	<500	2-Nitrophenol:	88-75-5	<500
4-Chloro-3-methylphenol:	59-50-7	<500	4-Nitrophenol:	100-02-7	<5000
2-Chlorophenol:	95-57-8	<500	N-Nitrosodiphenylamine:	86-30-6	<500
4-Chlorophenyl phenyl ether:	7005-72-3	<500	N-Nitrosodi-n-propylamine:	621-64-7	<500
Chrysene:	218-01-9	<500	N-Nitrosodimethylamine:	62-75-9	<500
Dibenz(a,h)anthracene:	53-70-3	<500	Pentachlorophenol:	87-86-5	<2500
Dibenzofuran:	132-64-9	<500	Phenanthrene:	85-01-8	<500
Di-n-butyl phthalate:	84-74-2	<500	Phenol:	108-95-2	<500
1,2-Dichlorobenzene:	95-50-1	<500	Pyrene:	129-00-0	<500
1,3-Dichlorobenzene:	541-73-1	<500	Pyridine:	110-86-1	<500
1,4-Dichlorobenzene:	106-46-7	<500	1,2,4-Trichlorobenzene:	120-82-1	<500
2,4-Dichlorophenol:	120-83-2	<500	2,4,5-Trichlorophenol:	95-95-4	<500
Diethyl phthalate:	84-66-2	<500	2,4,6-Trichlorophenol:	88-06-2	<500
2,4-Dimethylphenol:	105-67-9	<500			
Dimethyl phthalate:	131-11-3	<500			
4,6-Dinitro-2-methylphenol:	534-52-1	<5000			
2,4-Dinitrophenol:	51-28-5	<5000			
2,4-Dinitrotoluene:	121-14-2	<1300			
2,6-Dinitrotoluene:	606-20-2	<1300			

Surrogate:	% RC	Acceptable % RC
2-Fluorophenol:	26	20-130 %
Phenol-d6:	27	23-130 %
Nitrobenzene-d5:	27	25-130 %
2-Fluorobiphenyl:	26	32-130 %
2,4,6-Tribromophenol:	36	23-130 %
Terphenyl-d14:	29	34-130 %

Dilution Factor: 1

Data Qualifiers: S5,

Mr. Mathhew Kim
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13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Semi Volatile Organics by GC/MS (EPA 8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBAV1122173			11/22/2017	11/28/2017	Soil

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
Acenaphthene:	83-32-9	<500	Di-n-octyl phthalate:	117-84-0	<500
Acenaphthylene:	208-96-8	<500	Fluoranthene:	206-44-0	<500
Aniline:	62-53-3	<500	Fluorene:	86-73-7	<500
Anthracene:	120-12-7	<500	Hexachlorobenzene:	118-74-1	<500
Benz(a)anthracene:	56-55-3	<500	Hexachlorobutadiene:	87-68-3	<500
Benzo(b)fluoranthene:	205-99-2	<500	Hexachlorocyclopentadiene:	77-47-4	<2500
Benzo(k)fluoranthene:	207-08-9	<500	Hexachloroethane:	67-72-1	<500
Benzo(g,h,i)perylene:	191-24-2	<500	Indeno(1,2,3-cd)pyrene:	193-39-5	<500
Benzo(a)pyrene:	50-32-8	<500	Isophorone:	78-59-1	<500
Benzyl alcohol:	100-51-6	<500	2-Methylnaphthalene:	91-57-6	<500
bis-(2-chloroethoxy) methane:	111-91-1	<500	2-Methylphenol:	95-48-7	<500
bis-(2-chloroethyl) ether:	111-44-4	<500	3 & 4-Methylphenol:	108-39-4, 106-44-5	<500
bis-(2-chloroisopropyl) ether:	108-60-1	<500	Naphthalene:	91-20-3	<500
bis-(2-ethylhexyl) phthalate:	117-81-7	<500	2-Nitroaniline:	88-74-4	<1300
4-Bromophenyl phenyl ether:	101-55-3	<500	3-Nitroaniline:	99-09-2	<1300
Butyl benzyl phthalate:	85-68-7	<500	4-Nitroaniline:	100-01-6	<1300
4-Chloroaniline:	106-47-8	<500	Nitrobenzene:	98-95-3	<500
2-Chloronaphthalene:	91-58-7	<500	2-Nitrophenol:	88-75-5	<500
4-Chloro-3-methylphenol:	59-50-7	<500	4-Nitrophenol:	100-02-7	<5000
2-Chlorophenol:	95-57-8	<500	N-Nitrosodiphenylamine:	86-30-6	<500
4-Chlorophenyl phenyl ether:	7005-72-3	<500	N-Nitrosodi-n-propylamine:	621-64-7	<500
Chrysene:	218-01-9	<500	N-Nitrosodimethylamine:	62-75-9	<500
Dibenz(a,h)anthracene:	53-70-3	<500	Pentachlorophenol:	87-86-5	<2500
Dibenzofuran:	132-64-9	<500	Phenanthrene:	85-01-8	<500
Di-n-butyl phthalate:	84-74-2	<500	Phenol:	108-95-2	<500
1,2-Dichlorobenzene:	95-50-1	<500	Pyrene:	129-00-0	<500
1,3-Dichlorobenzene:	541-73-1	<500	Pyridine:	110-86-1	<500
1,4-Dichlorobenzene:	106-46-7	<500	1,2,4-Trichlorobenzene:	120-82-1	<500
2,4-Dichlorophenol:	120-83-2	<500	2,4,5-Trichlorophenol:	95-95-4	<500
Diethyl phthalate:	84-66-2	<500	2,4,6-Trichlorophenol:	88-06-2	<500
2,4-Dimethylphenol:	105-67-9	<500			
Dimethyl phthalate:	131-11-3	<500			
4,6-Dinitro-2-methylphenol:	534-52-1	<5000			
2,4-Dinitrophenol:	51-28-5	<5000			
2,4-Dinitrotoluene:	121-14-2	<1300			
2,6-Dinitrotoluene:	606-20-2	<1300			

Surrogate:	% RC	Acceptable % RC
2-Fluorophenol:	61	20-130 %
Phenol-d6:	62	23-130 %
Nitrobenzene-d5:	62	25-130 %
2-Fluorobiphenyl:	67	32-130 %
2,4,6-Tribromophenol:	52	23-130 %
Terphenyl-d14:	77	34-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	11/20/2017	11/20/2017	Solid

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	54	mg/kg	11/22/17	11/27/17	D1,	2
Arsenic	6010B	<4.0	mg/kg	11/22/17	11/27/17	D1,	2
Barium	6010B	130	mg/kg	11/22/17	11/27/17	D1,	2
Beryllium	6010B	<1.0	mg/kg	11/22/17	11/27/17	D1,	2
Cadmium	6010B	3.4	mg/kg	11/22/17	11/27/17	D1,	2
Chromium	6010B	150	mg/kg	11/22/17	11/27/17	D1,	2
Cobalt	6010B	15	mg/kg	11/22/17	11/27/17	D1,	2
Copper	6010B	390	mg/kg	11/22/17	11/27/17	D1,	2
Lead	6010B	80	mg/kg	11/22/17	11/27/17	D1,	2
Mercury	7471A	<0.20	mg/kg	11/22/17	11/27/17	D1,	2
Molybdenum	6010B	98	mg/kg	11/22/17	11/27/17	D1,	2
Nickel	6010B	250	mg/kg	11/22/17	11/27/17	D1,	2
Selenium	6010B	<9.6	mg/kg	11/22/17	11/27/17	D1,	2
Silver	6010B	3.2	mg/kg	11/22/17	11/27/17	D1,	2
Thallium	6010B	<4.0	mg/kg	11/22/17	11/27/17	D1,	2
Vanadium	6010B	8.8	mg/kg	11/22/17	11/27/17	D1,	2
Zinc	6010B	1200	mg/kg	11/22/17	11/27/17	D1,	2

Mr. Mathhew Kim
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13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
Method Blank				Solid

MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBJA1122174	Antimony	6010B	<2.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Arsenic	6010B	<2.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Barium	6010B	<1.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Beryllium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Cadmium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Chromium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Cobalt	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Copper	6010B	<5.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Lead	6010B	<0.80	mg/kg	11/22/17	11/27/17	--	1
MBJA1122175	Mercury	7471A	<0.10	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Molybdenum	6010B	<1.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Nickel	6010B	<1.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Selenium	6010B	<4.8	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Silver	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Thallium	6010B	<2.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Vanadium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Zinc	6010B	<5.0	mg/kg	11/22/17	11/27/17	--	1

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 11/27/2017
Date of Analysis: 11/27/2017
Dup Date of Analysis: 11/27/2017
Laboratory Sample #: 23306-001
MS/MSD Qualifiers: None
Reference #: PDI 23311

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloroethene	0.00	10.0	7.52	7.41	75	74	1	53-130	20	☐
Benzene	0.00	10.0	8.44	8.25	84	82	2	70-130	20	☐
Trichloroethene	0.00	10.0	9.16	9.13	92	91	0	70-135	20	☐
Toluene	0.00	10.0	7.98	7.96	80	80	0	66-130	20	☐
Chlorobenzene	0.00	10.0	8.39	8.16	84	82	3	70-130	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Dibromofluoromethane	102	108	☐
Toluene-d8	78	82	☐
4-Bromofluorobenzene	73	76	☐

LCS	LCSD	Qual
107	103	☐
78	78	☐
73	72	☐

ACP % RC
37-139
54-130
47-130

Laboratory Control Sample

Date of Extraction: 11/27/2017
Date of Analysis: 11/27/2017
Dup Date of Analysis: 11/27/2017
Laboratory Sample #: HT1127171
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
1,1-Dichloroethene	10.0	8.92	8.10	89	81	10	58-130	20	☐
Benzene	10.0	9.24	8.69	92	87	6	70-130	20	☐
Trichloroethene	10.0	9.93	9.33	99	93	6	70-130	20	☐
Toluene	10.0	8.90	8.68	89	87	3	68-130	20	☐
Chlorobenzene	10.0	9.16	8.51	92	85	7	70-130	20	☐

QA/QC Report
for
Semi-Volatile Organic Compounds (EPA 8270C)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 11/22/2017
Date of Analysis: 11/28/2017
Dup Date of Analysis: 11/28/2017
Laboratory Sample #: 23299-005
MS/MSD Qualifiers: None
Reference #: PDI 23311

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Phenol	0.00	2000	1190	1180	60	59	1	24-130	20	☐
2-Chlorophenol	0.00	2000	1130	1120	56	56	1	23-130	20	☐
1,4-Dichlorobenzene	0.00	1000	573	583	57	58	2	35-130	20	☐
N-Nitrosodi-n-propylamine	0.00	1000	658	656	66	66	0	41-130	20	☐
1,2,4-Trichlorobenzene	0.00	1000	591	594	59	59	1	30-130	20	☐
4-Chloro-3-methylphenol	0.00	2000	1030	1010	51	50	2	9-130	20	☐
Acenaphthene	0.00	1000	616	621	62	62	1	35-131	20	☐
4-Nitrophenol	0.00	2000	739	736	37	37	0	9-130	20	☐
2,4-Dinitrotoluene	0.00	1000	583	580	58	58	1	27-130	20	☐
Pentachlorophenol	0.00	2000	1010	952	50	48	6	7-141	20	☐
Pyrene	0.00	1000	623	570	62	57	9	32-135	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
2-Fluorophenol	58	58	☐	57	55	☐	20-130
Phenol-d6	59	58	☐	58	56	☐	23-130
Nitrobenzene-d5	58	57	☐	57	56	☐	25-130
2-Fluorobiphenyl	63	62	☐	62	60	☐	32-130
2,4,6-Tribromophenol	58	55	☐	56	53	☐	23-130
Terphenyl-d14	72	64	☐	73	70	☐	34-130

Laboratory Control Sample

Date of Extraction: 11/22/2017
Date of Analysis: 11/28/2017
Dup Date of Analysis: 11/28/2017
Laboratory Sample #: AV1122173
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Phenol	2000	1110	1070	56	54	4	35-130	20	☐
2-Chlorophenol	2000	1070	1020	54	51	5	35-130	20	☐
1,4-Dichlorobenzene	1000	561	544	56	54	3	44-130	20	☐
N-Nitrosodi-n-propylamine	1000	634	613	63	61	3	49-130	20	☐
1,2,4-Trichlorobenzene	1000	574	559	57	56	3	42-130	20	☐
4-Chloro-3-methylphenol	2000	911	892	46	45	2	33-130	20	☐
Acenaphthene	1000	602	577	60	58	4	50-130	20	☐
4-Nitrophenol	2000	732	695	37	35	5	29-130	20	☐
2,4-Dinitrotoluene	1000	581	556	58	56	4	43-130	20	☐
Pentachlorophenol	2000	947	908	47	45	4	33-130	20	☐
Pyrene	1000	619	578	62	58	7	39-130	20	☐

QA/QC Report
for
Metals

Reference #: PDI 23311 Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) **6010B/7471A**

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Mercury	11/22/2017	11/27/2017	11/27/2017	22306-001	0.00	1.00	1.19	1.20	119	120	1	80-120	20	--
Antimony	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	5.02	5.02	25	25	0	75-125	20	M2,
Arsenic	11/22/2017	11/27/2017	11/27/2017	23306-001	6.00	20.0	23.7	23.3	89	86	2	75-125	20	--
Barium	11/22/2017	11/27/2017	11/27/2017	23306-001	120	20.0	131	126	55	30	4	75-125	20	M3,
Beryllium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	20.1	19.7	100	99	2	75-125	20	--
Cadmium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.510	20.0	19.8	19.0	96	92	4	75-125	20	--
Chromium	11/22/2017	11/27/2017	11/27/2017	23306-001	20.0	20.0	36.4	35.6	82	78	2	75-125	20	--
Cobalt	11/22/2017	11/27/2017	11/27/2017	23306-001	5.00	20.0	24.5	23.5	98	93	4	75-125	20	--
Copper	11/22/2017	11/27/2017	11/27/2017	23306-001	12.0	20.0	31.5	30.1	98	91	5	75-125	20	--
Lead	11/22/2017	11/27/2017	11/27/2017	23306-001	67.0	20.0	85.7	77.7	93	53	10	75-125	20	M3,
Molybdenum	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	16.1	15.5	81	77	4	75-125	20	--
Nickel	11/22/2017	11/27/2017	11/27/2017	23306-001	8.90	20.0	27.5	27.0	93	91	2	75-125	20	--
Selenium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	17.6	17.7	88	89	1	75-125	20	--
Silver	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	19.3	18.4	96	92	5	75-125	20	--
Thallium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	17.2	16.4	86	82	5	75-125	20	--
Vanadium	11/22/2017	11/27/2017	11/27/2017	23306-001	36.0	20.0	53.0	53.8	85	89	1	75-125	20	--
Zinc	11/22/2017	11/27/2017	11/27/2017	23306-001	44.0	20.0	57.7	55.1	69	55	5	75-125	20	M3,

QA/QC Report
for
Metals

Reference #: PDI 23311 Reporting units: ppm

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
Antimony	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.4	19.6	102	98	4	80-120	20	--
Arsenic	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.5	19.0	98	95	3	80-120	20	--
Barium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.0	19.5	100	98	3	80-120	20	--
Beryllium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.2	19.2	101	96	5	80-120	20	--
Cadmium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.5	19.2	98	96	2	80-120	20	--
Chromium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.2	19.6	101	98	3	80-120	20	--
Cobalt	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.7	20.1	104	100	3	80-120	20	--
Copper	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.9	20.3	104	101	3	80-120	20	--
Lead	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.3	19.8	101	99	2	80-120	20	--
Molybdenum	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.3	19.6	101	98	4	80-120	20	--
Nickel	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	21.0	20.3	105	101	3	80-120	20	--
Selenium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.9	18.9	100	94	5	80-120	20	--
Silver	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.4	20.5	102	102	0	80-120	20	--
Thallium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	21.3	21.0	106	105	1	80-120	20	--
Vanadium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.7	19.1	99	96	3	80-120	20	--
Zinc	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.8	19.1	99	96	4	80-120	20	--
Mercury	11/22/2017	11/27/2017	11/27/2017	JA1122175	1.00	1.16	1.16	116	116	0	80-120	20	--

Data Qualifier Definitions

Qualifier

D1 = Sample required dilution due to matrix.

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

23306-001	6010B	Antimony	MS/MSD

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

23306-001	6010B	Barium	MS/MSD
23306-001	6010B	Lead	MS/MSD
23306-001	6010B	Zinc	MS/MSD

S5 = Surrogate recovery was below laboratory acceptance limits.

23311-001	8270C	Terphenyl-d14, 2-Fluorobiphenyl

Definition of terms:

R1	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

Analysis Request and Chain of Custody Record

Lab Job No: 23311
Page 1 of 1

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064 Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Paradigm Industries	PROJECT NAME:
SEND REPORT TO: Matthew Kim	NUMBER:
EMAIL: Kim@paradigmindustries.net	ADDRESS:
ADDRESS: 13344 S. Main St. Los Angeles, CA 90061	
PHONE: 661) 388-8899 FAX:	P.O. #:
	SAMPLED BY: Matthew Kim

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	ANALYSIS REQUEST / PRESERVATIVE: 8260	8270	CAM	REMARKS/PRECAUTIONS
P-1	2	11/20/17	11:00	Solid	Plastic	X	X	X	

Total No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	11/20/17 PM03:08		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 11/20/17 1508

Sample Matrix: WW - Wastewater; DW - Drinking Water; SS - Soil/Solid; GW - Groundwater; OT- Other

Sample Integrity: Intact ✓ On Ice No 22.4 °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, with Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup sample

Sample Receipt Report

Laboratory Reference: **PDI 23311** Logged in by SG

Received:	11/20/17 15:08	Company Name:	Paradigm Industries
Method of Shipment:	Hand Delivered	Project Manager:	Mr. Mathhew Kim
Shipping Container:	N/A	Project Name:	
# Shipping Containers:	0	Project #:	

Sample Quantity
1 Solid

Chain of Custody	Complete ☑	Incomplete ☐	None ☐
Samples On Ice	Yes, Wet ☐	Yes, Blue ☐	No ☑
Temperature	22.4°C		
Shipping Intact	Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact	Yes ☐	N/A ☑	No ☐
Samples Intact	Yes ☑		No ☐
Sample Custody Seals Intact	Yes ☐	N/A ☑	No ☐
Custody Seals Signed & Dated	Yes ☐	N/A ☑	No ☐
Proper Test Containers	Yes ☑		No ☐
Proper Test Preservations	Yes ☑		No ☐
Samples Within Hold Times	Yes ☑		No ☐
VOAs Have Zero Headspace	Yes ☐	N/A ☑	No ☐
Sample Labels	Complete ☐	Incomplete ☐	None ☑
Sample Information Matches COC	Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.: 2576
Expiration Date: 2017
Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client:	Paradigm Industries
Laboratory Reference:	PDI 23311
Project Name:	
Project Number:	
Date Received:	11/20/2017
Date Reported:	11/30/2017
Chain of Custody Received:	☑
Analytical Method:	8260B, 8270C, 6010B, 7471A,

Mark Noorani, Laboratory Director

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 22.4ºC.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	11/20/2017	11/20/2017	Solid

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
P-1	23311-001	11/20/2017	11/20/2017	11/22/2017	11/27/2017	Solid

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	Xylenes, Total	1330-20-7	<2.0
1,2-Dichloroethane	107-06-2	<2.5			
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	102	37-139 %
Toluene-d8:	77	54-130 %
4-Bromofluorobenzene:	68	47-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT1122172			11/22/2017	11/27/2017	Soil

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	Xylenes, Total	1330-20-7	<2.0
1,2-Dichloroethane	107-06-2	<2.5			
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	87	37-139 %
Toluene-d8:	82	54-130 %
4-Bromofluorobenzene:	70	47-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Semi Volatile Organics by GC/MS (EPA 8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
P-1	23311-001	11/20/2017	11/20/2017	11/22/2017	11/28/2017	Solid

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
Acenaphthene:	83-32-9	<500	Di-n-octyl phthalate:	117-84-0	<500
Acenaphthylene:	208-96-8	<500	Fluoranthene:	206-44-0	<500
Aniline:	62-53-3	<500	Fluorene:	86-73-7	<500
Anthracene:	120-12-7	<500	Hexachlorobenzene:	118-74-1	<500
Benz(a)anthracene:	56-55-3	<500	Hexachlorobutadiene:	87-68-3	<500
Benzo(b)fluoranthene:	205-99-2	<500	Hexachlorocyclopentadiene:	77-47-4	<2500
Benzo(k)fluoranthene:	207-08-9	<500	Hexachloroethane:	67-72-1	<500
Benzo(g,h,i)perylene:	191-24-2	<500	Indeno(1,2,3-cd)pyrene:	193-39-5	<500
Benzo(a)pyrene:	50-32-8	<500	Isophorone:	78-59-1	<500
Benzyl alcohol:	100-51-6	<500	2-Methylnaphthalene:	91-57-6	<500
bis-(2-chloroethoxy) methane:	111-91-1	<500	2-Methylphenol:	95-48-7	<500
bis-(2-chloroethyl) ether:	111-44-4	<500	3 & 4-Methylphenol:	108-39-4, 106-44-5	<500
bis-(2-chloroisopropyl) ether:	108-60-1	<500	Naphthalene:	91-20-3	<500
bis-(2-ethylhexyl) phthalate:	117-81-7	<500	2-Nitroaniline:	88-74-4	<1300
4-Bromophenyl phenyl ether:	101-55-3	<500	3-Nitroaniline:	99-09-2	<1300
Butyl benzyl phthalate:	85-68-7	<500	4-Nitroaniline:	100-01-6	<1300
4-Chloroaniline:	106-47-8	<500	Nitrobenzene:	98-95-3	<500
2-Chloronaphthalene:	91-58-7	<500	2-Nitrophenol:	88-75-5	<500
4-Chloro-3-methylphenol:	59-50-7	<500	4-Nitrophenol:	100-02-7	<5000
2-Chlorophenol:	95-57-8	<500	N-Nitrosodiphenylamine:	86-30-6	<500
4-Chlorophenyl phenyl ether:	7005-72-3	<500	N-Nitrosodi-n-propylamine:	621-64-7	<500
Chrysene:	218-01-9	<500	N-Nitrosodimethylamine:	62-75-9	<500
Dibenz(a,h)anthracene:	53-70-3	<500	Pentachlorophenol:	87-86-5	<2500
Dibenzofuran:	132-64-9	<500	Phenanthrene:	85-01-8	<500
Di-n-butyl phthalate:	84-74-2	<500	Phenol:	108-95-2	<500
1,2-Dichlorobenzene:	95-50-1	<500	Pyrene:	129-00-0	<500
1,3-Dichlorobenzene:	541-73-1	<500	1,2,4-Trichlorobenzene:	120-82-1	<500
1,4-Dichlorobenzene:	106-46-7	<500	2,4,5-Trichlorophenol:	95-95-4	<500
2,4-Dichlorophenol:	120-83-2	<500	2,4,6-Trichlorophenol:	88-06-2	<500
Diethyl phthalate:	84-66-2	<500			
2,4-Dimethylphenol:	105-67-9	<500			
Dimethyl phthalate:	131-11-3	<500			
4,6-Dinitro-2-methylphenol:	534-52-1	<5000			
2,4-Dinitrophenol:	51-28-5	<5000			
2,4-Dinitrotoluene:	121-14-2	<1300			
2,6-Dinitrotoluene:	606-20-2	<1300			

Surrogate:	% RC	Acceptable % RC
2-Fluorophenol:	26	20-130 %
Phenol-d6:	27	23-130 %
Nitrobenzene-d5:	27	25-130 %
2-Fluorobiphenyl:	26	32-130 %
2,4,6-Tribromophenol:	36	23-130 %
Terphenyl-d14:	29	34-130 %

Dilution Factor: 1

Data Qualifiers: S5,

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Semi Volatile Organics by GC/MS (EPA 8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBAV1122173			11/22/2017	11/28/2017	Soil

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
Acenaphthene:	83-32-9	<500	Di-n-octyl phthalate:	117-84-0	<500
Acenaphthylene:	208-96-8	<500	Fluoranthene:	206-44-0	<500
Aniline:	62-53-3	<500	Fluorene:	86-73-7	<500
Anthracene:	120-12-7	<500	Hexachlorobenzene:	118-74-1	<500
Benz(a)anthracene:	56-55-3	<500	Hexachlorobutadiene:	87-68-3	<500
Benzo(b)fluoranthene:	205-99-2	<500	Hexachlorocyclopentadiene:	77-47-4	<2500
Benzo(k)fluoranthene:	207-08-9	<500	Hexachloroethane:	67-72-1	<500
Benzo(g,h,i)perylene:	191-24-2	<500	Indeno(1,2,3-cd)pyrene:	193-39-5	<500
Benzo(a)pyrene:	50-32-8	<500	Isophorone:	78-59-1	<500
Benzyl alcohol:	100-51-6	<500	2-Methylnaphthalene:	91-57-6	<500
bis-(2-chloroethoxy) methane:	111-91-1	<500	2-Methylphenol:	95-48-7	<500
bis-(2-chloroethyl) ether:	111-44-4	<500	3 & 4-Methylphenol:	108-39-4, 106-44-5	<500
bis-(2-chloroisopropyl) ether:	108-60-1	<500	Naphthalene:	91-20-3	<500
bis-(2-ethylhexyl) phthalate:	117-81-7	<500	2-Nitroaniline:	88-74-4	<1300
4-Bromophenyl phenyl ether:	101-55-3	<500	3-Nitroaniline:	99-09-2	<1300
Butyl benzyl phthalate:	85-68-7	<500	4-Nitroaniline:	100-01-6	<1300
4-Chloroaniline:	106-47-8	<500	Nitrobenzene:	98-95-3	<500
2-Chloronaphthalene:	91-58-7	<500	2-Nitrophenol:	88-75-5	<500
4-Chloro-3-methylphenol:	59-50-7	<500	4-Nitrophenol:	100-02-7	<5000
2-Chlorophenol:	95-57-8	<500	N-Nitrosodiphenylamine:	86-30-6	<500
4-Chlorophenyl phenyl ether:	7005-72-3	<500	N-Nitrosodi-n-propylamine:	621-64-7	<500
Chrysene:	218-01-9	<500	N-Nitrosodimethylamine:	62-75-9	<500
Dibenz(a,h)anthracene:	53-70-3	<500	Pentachlorophenol:	87-86-5	<2500
Dibenzofuran:	132-64-9	<500	Phenanthrene:	85-01-8	<500
Di-n-butyl phthalate:	84-74-2	<500	Phenol:	108-95-2	<500
1,2-Dichlorobenzene:	95-50-1	<500	Pyrene:	129-00-0	<500
1,3-Dichlorobenzene:	541-73-1	<500	1,2,4-Trichlorobenzene:	120-82-1	<500
1,4-Dichlorobenzene:	106-46-7	<500	2,4,5-Trichlorophenol:	95-95-4	<500
2,4-Dichlorophenol:	120-83-2	<500	2,4,6-Trichlorophenol:	88-06-2	<500
Diethyl phthalate:	84-66-2	<500			
2,4-Dimethylphenol:	105-67-9	<500			
Dimethyl phthalate:	131-11-3	<500			
4,6-Dinitro-2-methylphenol:	534-52-1	<5000			
2,4-Dinitrophenol:	51-28-5	<5000			
2,4-Dinitrotoluene:	121-14-2	<1300			
2,6-Dinitrotoluene:	606-20-2	<1300			

Surrogate:	% RC	Acceptable % RC
2-Fluorophenol:	61	20-130 %
Phenol-d6:	62	23-130 %
Nitrobenzene-d5:	62	25-130 %
2-Fluorobiphenyl:	67	32-130 %
2,4,6-Tribromophenol:	52	23-130 %
Terphenyl-d14:	77	34-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	11/20/2017	11/20/2017	Solid

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	54	mg/kg	11/22/17	11/27/17	D1,	2
Arsenic	6010B	<4.0	mg/kg	11/22/17	11/27/17	D1,	2
Barium	6010B	130	mg/kg	11/22/17	11/27/17	D1,	2
Beryllium	6010B	<1.0	mg/kg	11/22/17	11/27/17	D1,	2
Cadmium	6010B	3.4	mg/kg	11/22/17	11/27/17	D1,	2
Chromium	6010B	150	mg/kg	11/22/17	11/27/17	D1,	2
Cobalt	6010B	15	mg/kg	11/22/17	11/27/17	D1,	2
Copper	6010B	390	mg/kg	11/22/17	11/27/17	D1,	2
Lead	6010B	80	mg/kg	11/22/17	11/27/17	D1,	2
Mercury	7471A	<0.20	mg/kg	11/22/17	11/27/17	D1,	2
Molybdenum	6010B	98	mg/kg	11/22/17	11/27/17	D1,	2
Nickel	6010B	250	mg/kg	11/22/17	11/27/17	D1,	2
Selenium	6010B	<9.6	mg/kg	11/22/17	11/27/17	D1,	2
Silver	6010B	3.2	mg/kg	11/22/17	11/27/17	D1,	2
Thallium	6010B	<4.0	mg/kg	11/22/17	11/27/17	D1,	2
Vanadium	6010B	8.8	mg/kg	11/22/17	11/27/17	D1,	2
Zinc	6010B	1200	mg/kg	11/22/17	11/27/17	D1,	2

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311
Project Name:
Project #:

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
Method Blank				Solid

MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBJA1122174	Antimony	6010B	<2.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Arsenic	6010B	<2.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Barium	6010B	<1.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Beryllium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Cadmium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Chromium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Cobalt	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Copper	6010B	<5.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Lead	6010B	<0.80	mg/kg	11/22/17	11/27/17	--	1
MBJA1122175	Mercury	7471A	<0.10	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Molybdenum	6010B	<1.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Nickel	6010B	<1.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Selenium	6010B	<4.8	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Silver	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Thallium	6010B	<2.0	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Vanadium	6010B	<0.50	mg/kg	11/22/17	11/27/17	--	1
MBJA1122174	Zinc	6010B	<5.0	mg/kg	11/22/17	11/27/17	--	1

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 11/27/2017
Date of Analysis: 11/27/2017
Dup Date of Analysis: 11/27/2017
Laboratory Sample #: 23306-001
MS/MSD Qualifiers: None
Reference #: PDI 23311

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloroethene	0.00	10.0	7.52	7.41	75	74	1	53-130	20	☐
Benzene	0.00	10.0	8.44	8.25	84	82	2	70-130	20	☐
Trichloroethene	0.00	10.0	9.16	9.13	92	91	0	70-135	20	☐
Toluene	0.00	10.0	7.98	7.96	80	80	0	66-130	20	☐
Chlorobenzene	0.00	10.0	8.39	8.16	84	82	3	70-130	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Dibromofluoromethane	102	108	☐
Toluene-d8	78	82	☐
4-Bromofluorobenzene	73	76	☐

LCS	LCSD	Qual
107	103	☐
78	78	☐
73	72	☐

ACP % RC
37-139
54-130
47-130

Laboratory Control Sample

Date of Extraction: 11/27/2017
Date of Analysis: 11/27/2017
Dup Date of Analysis: 11/27/2017
Laboratory Sample #: HT1127171
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
1,1-Dichloroethene	10.0	8.92	8.10	89	81	10	58-130	20	☐
Benzene	10.0	9.24	8.69	92	87	6	70-130	20	☐
Trichloroethene	10.0	9.93	9.33	99	93	6	70-130	20	☐
Toluene	10.0	8.90	8.68	89	87	3	68-130	20	☐
Chlorobenzene	10.0	9.16	8.51	92	85	7	70-130	20	☐

QA/QC Report
for
Semi-Volatile Organic Compounds (EPA 8270C)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 11/22/2017
Date of Analysis: 11/28/2017
Dup Date of Analysis: 11/28/2017
Laboratory Sample #: 23299-005
MS/MSD Qualifiers: None
Reference #: PDI 23311

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Phenol	0.00	2000	1190	1180	60	59	1	24-130	20	☐
2-Chlorophenol	0.00	2000	1130	1120	56	56	1	23-130	20	☐
1,4-Dichlorobenzene	0.00	1000	573	583	57	58	2	35-130	20	☐
N-Nitrosodi-n-propylamine	0.00	1000	658	656	66	66	0	41-130	20	☐
1,2,4-Trichlorobenzene	0.00	1000	591	594	59	59	1	30-130	20	☐
4-Chloro-3-methylphenol	0.00	2000	1030	1010	51	50	2	9-130	20	☐
Acenaphthene	0.00	1000	616	621	62	62	1	35-131	20	☐
4-Nitrophenol	0.00	2000	739	736	37	37	0	9-130	20	☐
2,4-Dinitrotoluene	0.00	1000	583	580	58	58	1	27-130	20	☐
Pentachlorophenol	0.00	2000	1010	952	50	48	6	7-141	20	☐
Pyrene	0.00	1000	623	570	62	57	9	32-135	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
2-Fluorophenol	58	58	☐	57	55	☐	20-130
Phenol-d6	59	58	☐	58	56	☐	23-130
Nitrobenzene-d5	58	57	☐	57	56	☐	25-130
2-Fluorobiphenyl	63	62	☐	62	60	☐	32-130
2,4,6-Tribromophenol	58	55	☐	56	53	☐	23-130
Terphenyl-d14	72	64	☐	73	70	☐	34-130

Laboratory Control Sample

Date of Extraction: 11/22/2017
Date of Analysis: 11/28/2017
Dup Date of Analysis: 11/28/2017
Laboratory Sample #: AV1122173
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Phenol	2000	1110	1070	56	54	4	35-130	20	☐
2-Chlorophenol	2000	1070	1020	54	51	5	35-130	20	☐
1,4-Dichlorobenzene	1000	561	544	56	54	3	44-130	20	☐
N-Nitrosodi-n-propylamine	1000	634	613	63	61	3	49-130	20	☐
1,2,4-Trichlorobenzene	1000	574	559	57	56	3	42-130	20	☐
4-Chloro-3-methylphenol	2000	911	892	46	45	2	33-130	20	☐
Acenaphthene	1000	602	577	60	58	4	50-130	20	☐
4-Nitrophenol	2000	732	695	37	35	5	29-130	20	☐
2,4-Dinitrotoluene	1000	581	556	58	56	4	43-130	20	☐
Pentachlorophenol	2000	947	908	47	45	4	33-130	20	☐
Pyrene	1000	619	578	62	58	7	39-130	20	☐

QA/QC Report
for
Metals

Reference #: PDI 23311 Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) **6010B/7471A**

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Mercury	11/22/2017	11/27/2017	11/27/2017	22306-001	0.00	1.00	1.19	1.20	119	120	1	80-120	20	--
Antimony	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	5.02	5.02	25	25	0	75-125	20	M2,
Arsenic	11/22/2017	11/27/2017	11/27/2017	23306-001	6.00	20.0	23.7	23.3	89	86	2	75-125	20	--
Barium	11/22/2017	11/27/2017	11/27/2017	23306-001	120	20.0	131	126	55	30	4	75-125	20	M3,
Beryllium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	20.1	19.7	100	99	2	75-125	20	--
Cadmium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.510	20.0	19.8	19.0	96	92	4	75-125	20	--
Chromium	11/22/2017	11/27/2017	11/27/2017	23306-001	20.0	20.0	36.4	35.6	82	78	2	75-125	20	--
Cobalt	11/22/2017	11/27/2017	11/27/2017	23306-001	5.00	20.0	24.5	23.5	98	93	4	75-125	20	--
Copper	11/22/2017	11/27/2017	11/27/2017	23306-001	12.0	20.0	31.5	30.1	98	91	5	75-125	20	--
Lead	11/22/2017	11/27/2017	11/27/2017	23306-001	67.0	20.0	85.7	77.7	93	53	10	75-125	20	M3,
Molybdenum	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	16.1	15.5	81	77	4	75-125	20	--
Nickel	11/22/2017	11/27/2017	11/27/2017	23306-001	8.90	20.0	27.5	27.0	93	91	2	75-125	20	--
Selenium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	17.6	17.7	88	89	1	75-125	20	--
Silver	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	19.3	18.4	96	92	5	75-125	20	--
Thallium	11/22/2017	11/27/2017	11/27/2017	23306-001	0.00	20.0	17.2	16.4	86	82	5	75-125	20	--
Vanadium	11/22/2017	11/27/2017	11/27/2017	23306-001	36.0	20.0	53.0	53.8	85	89	1	75-125	20	--
Zinc	11/22/2017	11/27/2017	11/27/2017	23306-001	44.0	20.0	57.7	55.1	69	55	5	75-125	20	M3,

QA/QC Report
for
Metals

Reference #: PDI 23311 Reporting units: ppm

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
Antimony	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.4	19.6	102	98	4	80-120	20	--
Arsenic	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.5	19.0	98	95	3	80-120	20	--
Barium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.0	19.5	100	98	3	80-120	20	--
Beryllium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.2	19.2	101	96	5	80-120	20	--
Cadmium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.5	19.2	98	96	2	80-120	20	--
Chromium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.2	19.6	101	98	3	80-120	20	--
Cobalt	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.7	20.1	104	100	3	80-120	20	--
Copper	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.9	20.3	104	101	3	80-120	20	--
Lead	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.3	19.8	101	99	2	80-120	20	--
Molybdenum	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.3	19.6	101	98	4	80-120	20	--
Nickel	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	21.0	20.3	105	101	3	80-120	20	--
Selenium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.9	18.9	100	94	5	80-120	20	--
Silver	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	20.4	20.5	102	102	0	80-120	20	--
Thallium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	21.3	21.0	106	105	1	80-120	20	--
Vanadium	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.7	19.1	99	96	3	80-120	20	--
Zinc	11/22/2017	11/27/2017	11/27/2017	JA1122174	20.0	19.8	19.1	99	96	4	80-120	20	--
Mercury	11/22/2017	11/27/2017	11/27/2017	JA1122175	1.00	1.16	1.16	116	116	0	80-120	20	--

Data Qualifier Definitions

Qualifier

D1 = Sample required dilution due to matrix.

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

23306-001	6010B	Antimony	MS/MSD

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

23306-001	6010B	Barium	MS/MSD
23306-001	6010B	Lead	MS/MSD
23306-001	6010B	Zinc	MS/MSD

S5 = Surrogate recovery was below laboratory acceptance limits.

23311-001	8270C	Terphenyl-d14, 2-Fluorobiphenyl

Definition of terms:

R1	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

Analysis Request and Chain of Custody Record

Lab Job No: 23311
Page 1 of 1

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064 Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Paradigm Industries	PROJECT NAME:
SEND REPORT TO: Matthew Kim	NUMBER:
EMAIL: Kim@paradigmindustries.net	ADDRESS:
ADDRESS: 13344 S. Main St. Los Angeles, CA 90061	
PHONE: 661) 388-8899 FAX:	P.O. #:
	SAMPLED BY: Matthew Kim

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	ANALYSIS REQUEST / PRESERVATIVE: 8260	8270	CAM	REMARKS/PRECAUTIONS
P-1	2	11/20/17	11:00	Solid	Plastic	X	X	X	

Total No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	11/20/17 PM03:08		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 11/20/17 1508

Sample Matrix: WW - Wastewater; DW - Drinking Water; SS - Soil/Solid; GW - Groundwater; OT- Other

Sample Integrity: Intact ✓ On Ice No 22.4 °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, with Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup sample

Sample Receipt Report

Laboratory Reference: **PDI 23311** Logged in by SG

Received:	11/20/17 15:08	Company Name:	Paradigm Industries
Method of Shipment:	Hand Delivered	Project Manager:	Mr. Mathhew Kim
Shipping Container:	N/A	Project Name:	
# Shipping Containers:	0	Project #:	

Sample Quantity
1 Solid

Chain of Custody	Complete ☑	Incomplete ☐	None ☐
Samples On Ice	Yes, Wet ☐	Yes, Blue ☐	No ☑
Temperature	22.4°C		
Shipping Intact	Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact	Yes ☐	N/A ☑	No ☐
Samples Intact	Yes ☑		No ☐
Sample Custody Seals Intact	Yes ☐	N/A ☑	No ☐
Custody Seals Signed & Dated	Yes ☐	N/A ☑	No ☐
Proper Test Containers	Yes ☑		No ☐
Proper Test Preservations	Yes ☑		No ☐
Samples Within Hold Times	Yes ☑		No ☐
VOAs Have Zero Headspace	Yes ☐	N/A ☑	No ☐
Sample Labels	Complete ☐	Incomplete ☐	None ☑
Sample Information Matches COC	Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.: 2576
Expiration Date: 2017
Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client:	Paradigm Industries
Laboratory Reference:	PDI 23311A
Project Name:	
Project Number:	
Date Received:	12/1/2017
Date Reported:	12/21/2017
Chain of Custody Received:	☑
Analytical Method:	6010B, 1311/6010B,

Mark Noorani, Laboratory Director

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311A
Project Name:
Project #:

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 22.4ºC.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311A
Project Name:
Project #:

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	12/1/2017	11/20/2017	Solid

Mr. Mathhew Kim
Paradigm Industries
13344 S. Main St.
Los Angeles, CA, 90061

Lab Reference #: PDI 23311A
Project Name:
Project #:

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	12/1/2017	11/20/2017	Solid

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
TCLP Chromium	6010B	0.040	mg/l	12/14/17	12/15/17	--	1

Method Blank — Solid

MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBJA1214174	TCLP Chromium	6010B	<0.020	mg/l	12/14/17	12/15/17	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
P-1	23311-001	12/1/2017	11/20/2017	Solid

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
STLC Chromium	6010B	0.75	mg/L	12/19/17	12/20/17	--	1
STLC Copper	6010B	14	mg/L	12/19/17	12/20/17	--	1
STLC Lead	6010B	0.25	mg/L	12/19/17	12/20/17	--	1
STLC Nickel	6010B	1.9	mg/L	12/19/17	12/20/17	--	1

Method Blank — Solid

MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBJA1219174	STLC Chromium	6010B	<0.050	mg/L	12/19/17	12/20/17	--	1
MBJA1219174	STLC Copper	6010B	<0.50	mg/L	12/19/17	12/20/17	--	1
MBJA1219174	STLC Lead	6010B	<0.20	mg/L	12/19/17	12/20/17	--	1
MBJA1219174	STLC Nickel	6010B	<0.10	mg/L	12/19/17	12/20/17	--	1

QA/QC Report
for
Metals

Reference #: PDI 23311A

Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) **1311/ 6010B**

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
TCLP Chromium	12/14/2017	12/15/2017	12/15/2017	AZ11105-001	0.00	0.400	0.396	0.404	99	101	2	75-125	20	--

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
TCLP Chromium	12/14/2017	12/15/2017	12/15/2017	JA1214174	0.400	0.368	0.359	92	90	2	80-120	20	--

QA/QC Report
for
Metals

Reference #: PDI 23311A

Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) **STLC CCR**

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
STLC Chromium	12/19/2017	12/20/2017	12/20/2017	23311-001	0.750	1.00	1.70	1.79	95	104	5	75-125	20	--
STLC Copper	12/19/2017	12/20/2017	12/20/2017	23311-001	14.0	1.00	15.5	16.2	150	220	4	75-125	20	M3,
STLC Lead	12/19/2017	12/20/2017	12/20/2017	23311-001	0.250	1.00	1.20	1.29	95	104	7	75-125	20	--
STLC Nickel	12/19/2017	12/20/2017	12/20/2017	23311-001	1.90	1.00	2.83	2.98	93	108	5	75-125	20	--

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
STLC Chromium	12/19/2017	12/20/2017	12/20/2017	JA1219174	1.00	1.01	1.03	101	103	2	80-120	20	--
STLC Copper	12/19/2017	12/20/2017	12/20/2017	JA1219174	1.00	0.976	0.979	98	98	0	80-120	20	--
STLC Lead	12/19/2017	12/20/2017	12/20/2017	JA1219174	1.00	0.951	0.975	95	98	2	80-120	20	--
STLC Nickel	12/19/2017	12/20/2017	12/20/2017	JA1219174	1.00	0.950	0.960	95	96	1	80-120	20	--

Data Qualifier Definitions

Qualifier

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

23311-001	STLC CCR	STLC Copper	MS/MSD

Definition of terms:

R1	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

Analysis Request and Chain of Custody Record

Lab Job No: 23311
Page 1 of 1

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064 Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Paradigm Industries	PROJECT NAME:
SEND REPORT TO: Matthew Kim	NUMBER:
EMAIL: Kim@paradigmindustries.net	ADDRESS:
ADDRESS: 13344 S. Main St. Los Angeles, CA 90061	
PHONE: 661) 388-8899 FAX:	P.O. #:
	SAMPLED BY: Matthew Kim

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	ANALYSIS REQUEST / PRESERVATIVE: 8260	8270	CAM	REMARKS/PRECAUTIONS
P-1	2	11/20/17	11:00	Solid	Plastic	X	X	X	

Total No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	11/20/17 PM03:08		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 11/20/17 1508

Sample Matrix: WW - Wastewater; DW - Drinking Water; SS - Soil/Solid; GW - Groundwater; OT- Other

Sample Integrity: Intact ✓ On Ice No 22.4 °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, with Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup sample

Sample Receipt Report

Laboratory Reference: **PDI 23311** Logged in by SG

Received:	11/20/17 15:08	Company Name:	Paradigm Industries
Method of Shipment:	Hand Delivered	Project Manager:	Mr. Mathhew Kim
Shipping Container:	N/A	Project Name:	
# Shipping Containers:	0	Project #:	

Sample Quantity
1 Solid

Chain of Custody	Complete ☑	Incomplete ☐	None ☐
Samples On Ice	Yes, Wet ☐	Yes, Blue ☐	No ☑
Temperature	22.4°C		
Shipping Intact	Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact	Yes ☐	N/A ☑	No ☐
Samples Intact	Yes ☑		No ☐
Sample Custody Seals Intact	Yes ☐	N/A ☑	No ☐
Custody Seals Signed & Dated	Yes ☐	N/A ☑	No ☐
Proper Test Containers	Yes ☑		No ☐
Proper Test Preservations	Yes ☑		No ☐
Samples Within Hold Times	Yes ☑		No ☐
VOAs Have Zero Headspace	Yes ☐	N/A ☑	No ☐
Sample Labels	Complete ☐	Incomplete ☐	None ☑
Sample Information Matches COC	Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

FAX

INCOMPLETE FILE TRANSMITTAL

TO: Holly Aasen	**LOG NO.:** 5123183849
FAX:	**File Received:** 3/8/2018
From: Special Waste Dept.	**Response Date:** 3/8/2018
Re: Paradigm Industries Inc / Mineral Foam and Gathering of Small Fabrics	

SECTION I	SECTION II	SECTION III	SECTION IV	SECTION V	SECTION VI
☐ DisposalFacility	☐ TransporterName	☐ NameOfWaste	☐ USEPA	☐ CharacteristicComponents	☐ GenAuthSignature
☐ GeneratorName	☐ TransporterSiteAddress	☐ ProcessGeneratingWaste	☐ SampleDate	☐ FreeLiquids	☐ GenCoName
☐ GeneratorSiteAddress	☐ TransporterCityStateZip	☐ TypeOfWaste	☐ CompositeGrab	☐ YesNo	☐ NoStateLetter
☐ GeneratorCityStateZip	☐ TransporterMailingAddress	☐ PhysicalState	☐ SampleID	☐ pH_Flash	☐ Name_Title
☐ GeneratorMailingAddress	☐ TransporterContactName	☐ MethodOfShipment			☐ SignatureDate
☐ GeneratorContactName	☐ TransporterTelFax	☐ EstimatedAnnualVolume			
☐ GeneratorTelFax		☐ Frequency			
☐ GeneratorStateID		☐ DisposalConsideration			
☐ WasteCodeTexas					

ANALYTICALS	TCLP TOTAL METALS	TCLP VOLATILES	TCLP SEMI-VOLATILES	PESTICIDES / HERBICIDE	
☐ TotalCyanide	☐ Arsenic	☐ Benzene	☐ Cresols	☐ Chlordane	☐ LabLetterhead
☐ ReactiveCyanide	☐ Barium	☐ CarbonTetrachloride	☐ DichlorobenzeneOne	☐ Endrin	☐ ChainOfCustody
☐ TotalSulfide	☐ Cadmium	☐ Chlorobenzene	☐ DinitrotolueneTwo	☐ Heptachlor	☐ NoLabSignature
☐ ReactiveSulfide	☐ Chromium	☐ Chloroform	☐ Hexachlorobenzene	☐ HeptachlorEpoxide	☐ ReportOneYearOldPlus
☐ TotalPCB	☐ Copper	☐ DichloroethaneOne	☐ Nitrobenzene	☐ Lindane	☐ NoThirdPartyLab
☐ TOX_EOX	☐ Lead	☐ DichloroehyleneTwo	☐ Pentachlorophenol	☐ Methoxychlor	☐ MissingReportPages
☐ Phenols	☐ Mercury	☑ MethylEthylKetone	☑ Pyridine	☐ Toxaphene	☐ MissingMSDSPages
☐ FlashPoint	☐ Selenium	☐ Tetrachloroethylene	☐ TrichlorophenolFive	☐ TwoFourD	☐ TotalSulfates
☐ pH	☐ Silver	☐ Trichlorethylene	☐ TrichlorphenolSix	☐ TwoFourFiveTP	☐ TotalSulfur
☐ PaintFilter	☐ Zinc	☐ VinylChloride			☐ WrongProfile
☐ TPH					
☐ BTEX					☑ GeneratorIncomplete

Notes:

Please have the generator contact the lab to add the RCRA regulated compounds Methyl Ethyl Ketone and Pyridine to the lab report for Sample 23311-001. The lab should be able to add the additional compounds to the report from the previous analysis of the sample. Additional analytical must be prepped and analyzed within method specified hold times.

Thank you,
Holly

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123184383	3/12/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Puratos Corporation

Generator Site Address: 18831 S Laurel Park Road

City: Rancho Dominguez **County:** **State:** CA **Zip:**

Name of Waste: Food Products

Estimated Annual Volume: 40,800 Pounds

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

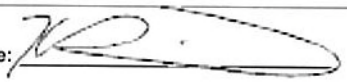
Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

"Dusty/Powdery" Material: Waste must be shipped
in a manner that minimizes fugitive dust emissions.
Proper PPE must be worn when handling this material.

Special Waste Analyst Signature: 

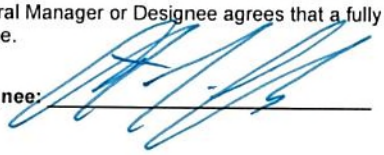
Name (Printed): KEITH DIAMANTI

Date: 3/19/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: 

Name (Printed): Chris Coyle

Date: 3/19/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

Waste Profile #
5123 18 4383
Sales Rep #: 585 - Ed Antolin

I. Generator Information

Generator Name: Puratos Corporation			
Generator Site Address: 18831 S. Laurel Park Road			
City: Rancho Dominguez	County: Los Angeles	State: California	Zip: 90220
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #:
Generator Mailing Address (if different): 18831 S. Laurel Park Road			
City: Rancho Dominguez	County: Rancho Dominguez	State: California	Zip: 90220
Generator Contact Name: Miguel Mendoza		Email: mmendoza@puratos.com	
Phone Number: (310) 632-5522 Ext: 254140		Fax Number: (310) 632-6633	

II. Billing Information

Bill To: Republic Services - Sunshine Canyon		Contact Name: Julie Resurreccion	
Billing Address: 2531 E. 67th Street		Email: JResurreccion@republicservices.com	
City: Long Beach	State: CA	Zip: 90805	Phone: (562) 762-0210

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).			
☐ Diesel Fuel	☐ Weathered Wood	☐ Friable Asbestos	
☐ Home Heating Fuel #1-6	☐ RCRA Empty Containers	☐ Non Friable Asbestos	
☐ Kerosene	☐ Treated Medical Waste	☐ Cured Asphalt	
☐ Aviation Fuel	☐ Animal Carcass (non infectious)	☐ Tires	
☐ Hydraulic Fluid	☐ Plant Trash	☑ Food Products	
☐ Unleaded Gasoline (UST Corrective Action)	☐ Meth Contaminated Debris		

Process Generating Waste: Bread Flour, Vendor Recall

Method of Shipment: ☐ BULK ☐ DRUM ☑ BAGGED ☐ OTHER:

Estimated Annual Volume: 40,800 Pounds

Frequency: ☑ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Miguel A. Mendoza, Warehouse Supervisor	Puratos Corporation
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	3/12/2018
	Date

REV 2

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123184431	3/19/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Kauai Organic Farms

Generator Site Address: 11101 S La Cienega Blvd

City: Los Angeles **County:** **State:** CA **Zip:**

Name of Waste: Food Products

Estimated Annual Volume: 3356 Pounds

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: 

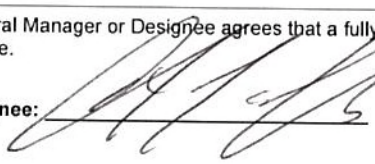
Name (Printed): KEITH DIAMANTI

Date: 3/19/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: 

Name (Printed): Chris Cayle

Date: 3/19/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 4431

Sales Rep #: 585 - Ed Antolin

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: Kauai Organic Farms			
Generator Site Address: 11101 S La Cienega Blvd			
City: Los Angeles	County:	State: California	Zip: 90045
State ID/Reg No:	State Approval/Waste Code:	(if applicable)	NAICS #:
Generator Mailing Address (if different): 4469 W North Waiakua			
City: Kilauea Kauai	County:	State: -- Select a State -- HI	Zip: 96754
Generator Contact Name: Phil Green		Email:	
Phone Number: 8086518843	Ext:	Fax Number:	

II. Billing Information

Bill To: Commodity Forwarders Inc		Contact Name: Frank Castro	
Billing Address: 11101 La Cienega Blvd		Email: franciscoc@cfiperishables.com	
City: Los Angeles	State: CA	Zip: 90045	Phone: 3103488855

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris)

- ☐ Diesel Fuel
- ☐ Home Heating Fuel #1-6
- ☐ Kerosene
- ☐ Aviation Fuel
- ☐ Hydraulic Fluid
- ☐ Unleaded Gasoline (UST Corrective Action)
- ☐ Weathered Wood
- ☐ RCRA Empty Containers
- ☐ Treated Medical Waste
- ☐ Animal Carcass (non infectious)
- ☐ Plant Trash
- ☐ Meth Contaminated Debris
- ☐ Friable Asbestos
- ☐ Non Friable Asbestos
- ☐ Cured Asphalt
- ☐ Tires
- ☑ Food Products (Including Animal Food)

Process Generating Waste: 102 boxes Tumeric placed on Hold by Los Angeles County Agriculture due to pest infestation.

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: 335615 -- Select Volume Type --

Frequency: ☒ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Phil Green / President
Authorized Representative Name/Title (Type or Print)

Kauai Organic Farms
Company Name

Authorized Representative Signature

3-19-18
Date

REV 2

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123185592	10/6/2018	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Green House Nurseries Inc

Generator Site Address: 9400 Canterbury Ave

City: Arleta	County:	State: CA	Zip:

Name of Waste: Unidentifiable Insect Eggs on Plants from Florida

Estimated Annual Volume: 1 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

This material must be buried immediately upon receipt at the landfill.

Proper PPE must be worn when handling this material.

Special Waste Analyst Signature: Holly M Wilson **Name (Printed):** Holly Wilson

Date: 4/6/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 4/6/2018

REPUBLIC SERVICES SPECIAL WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 5592

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Sales Rep #: 585 - Ed Antolin

I. Generator Information

Generator Name: Green House Nurseries Inc			
Generator Site Address: 9400 Canterbury Ave.			
City: Arleta	County: Los Angeles	State: California	Zip: 91331
State ID/Reg No: N/A	State Approval/Waste Code: N/A (if applicable)		NAICS # : N/A
Generator Mailing Address (if different): ☐ 9400 Canterbury Ave.			
City: Arleta	County: Los Angeles	State: California	Zip: 91331
Generator Contact Name: Paul Needleman		Email: paul@greenhousenurseries.com	
Phone Number: (818) 899-0977	Ext: N/A	Fax Number: (818) 899-6857	

II. Billing Information

Bill To: same as above		Contact Name:	
Billing Address:		Email:	
City:	State:	Zip:	Phone:

III. Waste Stream Information

Name of Waste: Unidentifiable insect eggs on plants from Florida	
Process Generating Waste: Ag department had us cutup the foliage and put in 40 gal plastic bags. There are 19 of them	
Type of Waste:	☐ INDUSTRIAL PROCESS WASTE ☑ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☐ BULK ☐ DRUM ☑ BAGGED ☐ OTHER:
Estimated Annual Volume:	1 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification

☑ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Waste Profile #
5123 18 5592

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Foliage	99%
2. Insect Eggs	1%
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
green	none	☐ YES or ☑ NO	100%	7	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Paul Needleman President — Authorized Representative Name And Title (Type or Print)

Green House Nurseries Inc. — Company Name

Paul Needleman — Authorized Representative Signature

04/06/2018 — Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123185694	4/10/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Department of Transportation - Caltrans District 7

Generator Site Address: 07-LA-10, 710 Various

City: Various **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 4000 Pounds

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of TWW must be in accordance with the California Health and Safety Code (HSC) sections 24143.1.5, 25150.7 and 25150.8.

A Waste Shipment Record for each generating facility/location within the load must accompany each load to the landfill.

Special Waste Analyst Signature: _____ **Name (Printed):** Suzanne Glass

Date: 4/10/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Cayle

Date: 4/10/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

Waste Profile #
5123 18 5694
Sales Rep #. 585 - Ed Antolin

I. Generator Information

Generator Name: Department of Transportation - Caltrans District 7			
Generator Site Address: 07-LA-10, 710 (Various)			
City: Various	County: Los Angeles	State: California	Zip: 90061
State ID/Reg No: n/a	State Approval/Waste Code: n/a (if applicable)		NAICS #. n/a
Generator Mailing Address (if different): 13230 Firestone Blvd			
City: Santa Fe Springs	County: Los Angeles	State: California	Zip: 90670
Generator Contact Name: Bernard Y. Alonzo		Email: bernard.y.alonzo@dot.ca.gov	
Phone Number: (562) 345-3145 Ext:		Fax Number:	

II. Billing Information

Bill To: Crosstown Electrical & Data, Inc.		Contact Name: Wendy Parker	
Billing Address: 5454 Diaz Street		Email: Wendy@Crosstowndata.com	
City: Irwindale	State: California	Zip: 91706	Phone: (626) 813-6693

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).			
☐ Diesel Fuel	☐ Home Heating Fuel #1-6	☐ Kerosene	☐ Aviation Fuel
☐ Hydraulic Fluid	☐ Unleaded Gasoline (UST Corrective Action)		
☑ Weathered Wood	☐ RCRA Empty Containers	☐ Treated Medical Waste	☐ Animal Carcass (non infectious)
☐ Plant Trash	☐ Meth Contaminated Debris		
☐ Friable Asbestos	☐ Non Friable Asbestos	☐ Cured Asphalt	☐ Tires
☐ Food Products (Including Animal Food)			

Process Generating Waste: Removal of existing roadway (freeway) signs per project.
ID No. 0714000246
Contract No. 07-308604

Method of Shipment: ☐ BULK ☐ DRUM ☐ BAGGED ☑ OTHER: Wrapped in Visqueen Plastic

Estimated Annual Volume: 4,000 Pounds

Frequency: ☑ ONE TIME ☐ ONGOING FOR CONTRACT 07-308604

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Bernard Y. Alonzo - Resident Engineer	Caltrans District 7 (DOT)
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	04/09/18
	Date

REPUBLIC SERVICES

THIRD PARTY SIGNATURE AUTHORIZATION
for Special Waste Disposal

Date: APRIL 09, 2018

This Authorization is only valid for ~~3 years from the above date~~. CONTRACT 07-308604

To Whom It May Concern:

Please be advised that the following company/individual has been appointed to work as our agent for purposes of managing waste materials that we may generate.

Name of Authorized Agent	Title
Gilbert Rodarte	Project Manager
Name of Company	Telephone Number
Crosstown Electrical & Data, Inc.	(626) 813 - 6693

The above broker/individual is authorized to act as our authorized agent for the following purposes:

- ■ Complete and sign Special Waste Profile.
- ■ Complete and sign Special Waste Profile-Recertification.
- ■ Authorize amendments to Special Waste Profile.
- ■ Sign contracts to dispose and/or transport material.
- ■ Sign certifications necessary to comply with landfill requirements.
- ■ Sign manifests to initiate shipment to disposal facilities.

Our authorized agent will notify us prior to any action stated above, and will provide us with copies of any documents bearing our name.

Name of Company	Mailing Address
DOT-Caltrans D7	13230 Firestone Blvd., Santa Fe Springs, CA 90670
Generator Contact (Print Name)	Title
Bernard Y. Alonzo	Resident Engineer
Signature	Telephone Number
Bernard Y. Alonzo	(562) 345 - 3145

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123186344	7/18/2018	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Times Produce Inc

Generator Site Address: 130 S Myers Street

City: Los Angeles **County:** **State:** CA **Zip:**

Name of Waste: Food Wastes

Estimated Annual Volume: 420 Pounds

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

FOOD WASTE: This waste must be buried immediately upon receipt at the landfill.

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 4/19/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Cagle

Date: 4/19/2018

REPUBLIC SERVICES

EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 6344

Sales Rep #: 585 - Ed Antolin

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: Times Produce Inc.			
Generator Site Address: 130 S. Myers Street			
City: Los Angeles	County: Los Angeles	State: California	Zip: 90033
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different): 130 S. Myers Street			
City: Los Angeles	County: Los Angeles	State: California	Zip: 90033
Generator Contact Name: Randy Sonoda		Email: randy@timesproduce.com	
Phone Number: (323) 261-6677	Ext:	Fax Number: (323) 261-6688	

II. Billing Information

Bill To: Times Produce Inc.		Contact Name: Randy	
Billing Address: 130 S. Myers Street		Email: randy@timesproduce.com	
City: Los Angeles	State: California	Zip: 90033	Phone: (323) 261-6677

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).

- ☐ Diesel Fuel
- ☐ Home Heating Fuel #1-6
- ☐ Kerosene
- ☐ Aviation Fuel
- ☐ Hydraulic Fluid
- ☐ Unleaded Gasoline (UST Corrective Action)
- ☐ Weathered Wood
- ☐ RCRA Empty Containers
- ☐ Treated Medical Waste
- ☐ Animal Carcass (non infectious)
- ☐ Plant Trash
- ☐ Meth Contaminated Debris
- ☐ Friable Asbestos
- ☐ Non Friable Asbestos
- ☐ Cured Asphalt
- ☐ Tires
- ☑ Food Products (Including Animal Food)

Process Generating Waste: 420 lb of produce (hawaiian yams) 14 units of 30lb

Method of Shipment: ☐ BULK ☐ DRUM ☑ BAGGED ☐ OTHER:

Estimated Annual Volume: 420 Pounds

Frequency: ☑ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Randy Sonoda President
Authorized Representative Name/Title (Type or Print)

Authorized Representative Signature

Times produce Inc
Company Name

04/19/2018
Date

REV 2

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123186800	4/26/2021	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: RainField Marketing Group Inc

Generator Site Address: 3305 Bandini Blvd

City: Vernon **County:** **State:** CA **Zip:**

Name of Waste: Food Products

Estimated Annual Volume: 3000 Pounds

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

This waste must be able to pass a paint filter test
prior to shipment and disposal.
Free liquids are not permitted for landfill disposal.

Special Waste Analyst Signature: 

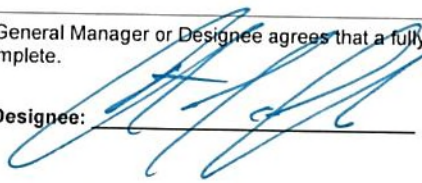
Name (Printed): KEITH DIAMANTI

Date: 4/26/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: 

Name (Printed): 

Date: 4/26/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 6800

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

Sales Rep #. 585 - Ed Antolin

I. Generator Information

Generator Name: Rainfield Marketing Group, Inc.			
Generator Site Address: 3305 Bandini Blvd			
City: Vernon	County: Los Angeles	State: California	Zip: 90058
State ID/Reg No: 03975684	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different):			
City:	County:	State: -- Select a State --	Zip:
Generator Contact Name: Richard Choe		Email:	
Phone Number: 2135506998	Ext:	Fax Number: 3233192884	

II. Billing Information

Bill To: Rainfield Marketing Group, Inc.		Contact Name: Richard Choe	
Billing Address: 3305 Bandini Blvd		Email: rmgproduce@gmail.com	
City: Vernon	State: CA	Zip: 90058	Phone: 2135506998

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).

- ☐ Diesel Fuel
- ☐ Home Heating Fuel #1-6
- ☐ Kerosene
- ☐ Aviation Fuel
- ☐ Hydraulic Fluid
- ☐ Unleaded Gasoline (UST Corrective Action)
- ☐ Weathered Wood
- ☐ RCRA Empty Containers
- ☐ Treated Medical Waste
- ☐ Animal Carcass (non infectious)
- ☐ Plant Trash
- ☐ Meth Contaminated Debris
- ☐ Friable Asbestos
- ☐ Non Friable Asbestos
- ☐ Cured Asphalt
- ☐ Tires
- ☑ Food Products (Including Animal Food)

Process Generating Waste: Dump Fruits and Vegetables Waste

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: 3000 Pounds

Frequency: ☐ ONE TIME ☑ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Richard Choe / Officer	Rainfield Marketing Group, Inc
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	April 26, 2018
	Date

REV 2

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile # 5123188141	**Expiration Date** 5/18/2019	
I. Decision Request:	☑ **Initial** ☐ **Recertification** ☐ **Change**		

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: City of San Gabriel

Generator Site Address: Del Mar Ave over Alhambra Wash

City: San Gabriel	**County:**	**State:** CA	**Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 17 Cubic Yards

II. Special Waste Department Decision: ☑ **Approved** ☐ **Rejected**

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of TWW must be in accordance with the California Health and Safety Code (HSC) sections 24143.1.5, 25150.7 and 25150.8.

Special Waste Analyst Signature: _____ **Name (Printed):** Holly Wilson

Date: 5/18/2018

III. Facility Decision: ☑ **Approved** ☐ **Rejected**

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Coyle

Date: 5/18/2018

REPUBLIC SERVICES — EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #
5123 18 8141
Sales Rep #. 585 - Ed Antolin

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: City of San Gabriel			
Generator Site Address: Del Mar Ave over Alhambra Wash			
City: San Gabriel	County: Los Angeles	State: California	Zip: 91776
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different): PO Box 130			
City: San Gabriel	County: Los Angeles	State: California	Zip: 91776
Generator Contact Name: Algis Mariuska		Email:	
Phone Number: (626) 261-1995 Ext:		Fax Number:	

II. Billing Information

Bill To: Shimmick Construction Co Inc		Contact Name: Chris Ponds	
Billing Address: 8201 Edgewater Drive #202		Email: cponds@shimmick.com	
City: Oakland	State: CA	Zip: 94621	Phone: (310) 261-7217

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).			
☐ Diesel Fuel	☐ Home Heating Fuel #1-6	☐ Kerosene	☐ Aviation Fuel
☐ Hydraulic Fluid	☐ Unleaded Gasoline (UST Corrective Action)		
☑ Weathered Wood	☐ RCRA Empty Containers	☐ Treated Medical Waste	☐ Animal Carcass (non infectious)
☐ Plant Trash	☐ Meth Contaminated Debris		
☐ Friable Asbestos	☐ Non Friable Asbestos	☐ Cured Asphalt	☐ Tires
☐ Food Products (Including Animal Food)			

Process Generating Waste: Treated Wood Waste from bridge abutment wing wall demolition at Del Mar Ave over Alhambra Wash

Method of Shipment: ☐ BULK ☐ DRUM ☐ BAGGED ☑ OTHER: Super Ten Truck - Tarped

Estimated Annual Volume: 17 Cubic Yards

Frequency: ☑ ONE TIME ☐ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Algis Mariuska - Director	City of San Gabriel
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	5/17/18
	Date

REV 2

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123188232	5/21/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Southern California Edison Walnut Substation

Generator Site Address: 16333 Gale Avenue

City	County	State	Zip
City of Industry		CA	

Name of Waste: Non Hazardous Soil

Estimated Annual Volume: 2 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: _____ **Name (Printed):** Holly Wilson

Date: 5/21/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Coyle

Date: 5/21/2018

REPUBLIC SERVICES SPECIAL WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #
5123 18 8232
Sales Rep #: 585 - Ed Antolin

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: Southern California Edison- Walnut Substation			
Generator Site Address: 16333 Gale Avenue			
City: City of Industry	County: Los Angeles	State: California	Zip: 91745
State ID/Reg No: NA	State Approval/Waste Code: NA (if applicable)		NAICS # :
Generator Mailing Address (if different): ☑ 2244 Walnut Grove Avenue			
City: Rosemead	County: Los Angeles	State: California	Zip: 91770
Generator Contact Name: Christine Parsons		Email: christine.parsons@sce.com	
Phone Number: (714) 614-6093	Ext:	Fax Number:	

II. Billing Information

Bill To: NRG Power, Inc.		Contact Name: Ken Pham	
Billing Address: 3011 S. Shannon St.		Email: ken@nrgpower.net	
City: Santa Ana	State: CA	Zip: 92704	Phone: (714) 424-6484

III. Waste Stream Information

Name of Waste: Non-hazardous soil

Process Generating Waste:

The soil was generated during construction activities at a substation. No PCBs or other contaminants were expected, but representative samples were collected and analyzed for PCBs, metals, and VOCs. All results were below hazardous waste disposal limits.

Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	2 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification ☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☑ GRAB SAMPLE	
Sample Date: 8/29/17	
Sample ID Numbers: HA7-0.5', HA7-2.0', HA8-0.5', HA8-2.0'	

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Waste Profile #
5123 18 8232

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Soil	100
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
Brown	None	☐ YES or ☑ NO	100	NA	NA °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Michael Weinberger (Hazardous Waste Specialist)	Southern California Edison
Authorized Representative Name And Title (Type or Print)	Company Name
Authorized Representative Signature	5/18/18
	Date

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Number of Pages	**21**
Date Received	**08/29/2017**
Date Reported	**09/05/2017**

Job Number	Order Date	Client
89157	08/29/2017	SCE

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's
Site: Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Enclosed please find results of analyses of 12 soil and 5 concrete samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

102214

AETL JOB No. 89157

Page 1 of 2

COMPANY	Northgate for SCE
PROJECT MANAGER	Christine Brendle / SCE Joni Fisher / Northgate
COMPANY ADDRESS	24411 Ridge Route Dr., Laguna Hills
PHONE	(949) 310-6024
FAX	
PROJECT NAME	Walnut sub 220kV CBs
PROJECT #	IO# 337440 SAP# 900772538
SITE NAME AND ADDRESS	Walnut Substation 16333 Gale Ave., City of Industry
PO #	

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	PCBs - EPA 8082	TPH - EPA 8015B	Title 22 Metals / EPA 6010B/7471A	VOCs - EPA 8260B	TEST INSTRUCTIONS & COMMENTS
1	HA10-0.5'	89157.01	8/29/17	0640	Soil	1x8-oz Jar	Ice	X	X	X		PQL for PCBs = 1.0 mg/kg Analyze for VOCs only if TPH detected, then only on sample with highest TPH.
2	HA10-2.0'	89157.02		0645				X	X	X		
3	HA10-5.0'	89157.03		0700								HOLD
4	HA11-0.5'	89157.04		0710				X	X	X		
5	HA11-2.0'	89157.05		0715				X	X	X		
6	HA11-5.0'	89157.06		0730								HOLD
7	HA12-0.5'	89157.07		0745				X	X	X		
8	HA12-2.0'	89157.08		0750				X	X	X		
9	HA12-5.0'	89157.09		0800								HOLD
10	HA13-0.5'	89157.10		0830				X	X	X		
11	HA13-2.0'	89157.11		0850				X	X	X		
12	HA13-5.0'	89157.12		0900								HOLD
13	HA8-0.5'	89157.13		0925				X	X	X		
14	HA8-2.0'	89157.14		0930				X	X	X		
15	HA8-5.0'	89157.15		0945								HOLD

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	15	PROPERLY COOLED (Y) N / NA	
CUSTODY SEALS Y / (N) / NA		SAMPLES INTACT (Y) / N / NA	
RECEIVED IN GOOD COND. (Y) N		SAMPLES ACCEPTED (Y) / N	

TURN AROUND TIME

☒ NORMAL ☐ RUSH
5 DAY
☐ SAME DAY ☐ NEXT DAY ☐ 2 DAYS ☐ 3 DAYS

DATA DELIVERABLE REQUIRED

☐ HARD COPY ☐ PDF ☐ GEOTRACKER (GLOBAL ID) _____ ☐ OTHER (PLEASE SPECIFY) _____

	RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature:	Cem		
Printed Name:	CEM KAMALI		
Date / Time:	8/29/17 1510	/	8/29/17 1750
	RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY LABORATORY: 3.**
Signature:			
Printed Name:			AETL
Date / Time:	8/29/17 1510	/	08/29/17 1730

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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CHAIN OF CUSTODY RECORD

102213

60108/74714

AETL JOB No. 89157

Page 2 of 2

COMPANY: Northgate for SCE
PROJECT MANAGER: Christine Brendley/SCE; Joni Fisher/Northgate
COMPANY ADDRESS: 24411 Ridge Route Dr.; Laguna Hills
PHONE: (949) 310-6024
FAX:
PROJECT NAME: Walnut Sub 220 kV CBs
PROJECT #: ID # 337440
SAP # 900 772 538
SITE NAME AND ADDRESS: Walnut Substation; 16333 Gale Ave.; City of Industry
PO #:

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	PCBs - EPA 8082	TPH - EPA 8015B	Title 22 Metals	VOCs - EPA 8260B	TEST INSTRUCTIONS & COMMENTS
1	HA7-0.5'	89157.16	8/29/17	1020	Soil	1x8-oz Jar	Ice	X	X	X		PQL for PCBs = 1.0 mg/kg Analyze for VOCs only if TPH detected, then only on sample with highest TPH.
2	HA7-2.0'	89157.17	"	1025	"	"	"	X	X	X		
3	HA7-5.0'	89157.18	"	1045	"	"	"					HOLD
4	C1	89157.19	"	1230	Concrete	1x4-oz Jar	"	X				
5	C2	89157.20	"	1215	"	"	"	X				
6	C3	89157.21	"	1320	"	"	"	X				
7	C4	89157.22	"	1300	"	"	"	X				
8	C5	89157.23	"	1310	"	"	"	X				
9												
10												
11												
12												
13												
14												
15												

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	8	PROPERLY COOLED (Y / N / NA)	
CUSTODY SEALS (Y / N / NA)		SAMPLES INTACT (Y / N / NA)	
RECEIVED IN GOOD COND. (Y / N)		SAMPLES ACCEPTED (Y / N)	

TURN AROUND TIME

☒ NORMAL ☐ RUSH
5 DAY
☐ SAME DAY ☐ NEXT DAY ☐ 2 DAYS ☐ 3 DAYS

DATA DELIVERABLE REQUIRED

☐ HARD COPY ☐ PDF ☐ GEOTRACKER (GLOBAL ID) _____ ☐ OTHER (PLEASE SPECIFY) _____

	1.	2.	3.
RELINQUISHED BY SAMPLER:	Signature: Cem Printed Name: CEM KAMALI Date: 8/29/17 Time: 1510		
RELINQUISHED BY:		Signature: Printed Name: Date: Time:	Signature: Printed Name: Date: 8/29/17 Time: 1730
RECEIVED BY:	Signature: Printed Name: Date: 8/29/17 Time: 1510		
RECEIVED BY:		Signature: Printed Name: Date: Time:	
RECEIVED BY LABORATORY:			AETL Signature: Printed Name: Date: 8/29/17 Time: 1730

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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COOLER RECEIPT FORM

Client Name: Edison

Project Name:

AETL Job Number: 89157

Date Received: 08/29/17 Received by: Antin

Carrier: ☒ AETL Courier ☐ Client ☐ GSO ☐ FedEx ☐ UPS

☐ Others:

Samples were received in: ☒ Cooler (/) ☐ Other (Specify):

Inside temperature of shipping container No 1: 3-2°, No 2: _____, No 3: _____

Type of sample containers: ☐ VOA, ☐ Glass bottles, ☒ Wide mouth jars, ☐ HDPE bottles, ☐ Metal sleeves, ☐ Others (Specify): _____

How are samples preserved: ☐ None, ☒ Ice, ☐ Blue Ice, ☐ Dry Ice

☒ None, _ HNO_3, _ NaOH, _ ZnOAc, _ HCl, _ $Na_2S_2O_3$, _ MeOH

_ Other (Specify):

	Yes	No, explain below	Name, if client was notified.
1. Are the COCs Correct?	✓		
2. Are the Sample labels legible?	✓		
3. Do samples match the COC?	✓		
4. Are the required analyses clear?	✓		
5. Is there enough samples for required analysis?	✓		
6. Are samples sealed with evidence tape?		✓	
7. Are sample containers in good condition?	✓		
8. Are samples preserved?	✓		
9. Are samples preserved properly for the intended analysis?	✓		
10. Are the VOAs free of headspace?	N/A		
11. Are the jars free of headspace?	1		

Explain all "No" answers for above questions:

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Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337440
Date Received 08/29/2017
Date Reported 09/05/2017

Job Number	Order Date	Client
89157	08/29/2017	SCE

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 23 samples with the following specification on 08/29/2017.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89157.01	HA10-0.5'	08/29/2017	Soil	1
89157.02	HA10-2.0'	08/29/2017	Soil	1
89157.04	HA11-0.5'	08/29/2017	Soil	1
89157.05	HA11-2.0'	08/29/2017	Soil	1
89157.07	HA12-0.5'	08/29/2017	Soil	1
89157.08	HA12-2.0'	08/29/2017	Soil	1
89157.10	HA13-0.5'	08/29/2017	Soil	1
89157.11	HA13-2.0'	08/29/2017	Soil	1
89157.13	HA8-0.5'	08/29/2017	Soil	1
89157.14	HA8-2.0'	08/29/2017	Soil	1
89157.16	HA7-0.5'	08/29/2017	Soil	1
89157.17	HA7-2.0'	08/29/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(6010B/7000CAM) ^ SCE	09/05/2017	2	Normal	mg/Kg
(8082) ^ SCE-1PPM	09/05/2017	2	Normal	mg/Kg
(M8015D) ^ SCE-C13C40	09/05/2017	2	Normal	mg/Kg
(M8015G) ^ SCE-C4-C12	09/05/2017	2	Normal	mg/Kg

89157.03	HA10-5.0'	08/29/2017	Soil	1
89157.06	HA11-5.0'	08/29/2017	Soil	1
89157.09	HA12-5.0'	08/29/2017	Soil	1
89157.12	HA13-5.0'	08/29/2017	Soil	1
89157.15	HA8-5.0'	08/29/2017	Soil	1
89157.18	HA7-5.0'	08/29/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
ARCHIVE	09/05/2017	2	Normal	--

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers

Continued

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Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337440
Date Received 08/29/2017
Date Reported 09/05/2017

Job Number	Order Date	Client
89157	08/29/2017	SCE

CERTIFICATE OF ANALYSIS

CASE NARRATIVE

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89157.19	C1	08/29/2017	Solid	1
89157.20	C2	08/29/2017	Solid	1
89157.21	C3	08/29/2017	Solid	1
89157.22	C4	08/29/2017	Solid	1
89157.23	C5	08/29/2017	Solid	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8082) ^ SCE-1PPM	09/05/2017	2	Normal	mg/Kg

The samples were analyzed as specified on the enclosed chain of custody. Analytical non-conformances have been noted on the report.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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ANALYTICAL RESULTS

Ordered By

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Telephone: (909)274-1646
Attn: Christine Brendle

Site

Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Page: **2**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 083017NB1

Our Lab I.D.			Method Blank	**89157.01**	**89157.02**	**89157.04**	**89157.05**
Client Sample I.D.				HA10-0.5'	HA10-2.0'	HA11-0.5'	HA11-2.0'
Date Sampled				08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**89157.01**	**89157.02**	**89157.04**	**89157.05**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		104	102	98.2	100	102

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Site

Walnut Substation
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City of Industry, CA 91745

Page: 3

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 083017NB1

Our Lab I.D.			89157.07	89157.08	89157.10	89157.11	89157.13
Client Sample I.D.			HA12-0.5'	HA12-2.0'	HA13-0.5'	HA13-2.0'	HA8-0.5'
Date Sampled			08/29/2017	08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND	ND	ND
Our Lab I.D.			**89157.07**	**89157.08**	**89157.10**	**89157.11**	**89157.13**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		108	100	103	99.6	103

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Telephone: (909)274-1646
Attn: Christine Brendle
Page: **4**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 083017NB1

Our Lab I.D.			**89157.14**	**89157.16**	**89157.17**		
Client Sample I.D.			HA8-2.0'	HA7-0.5'	HA7-2.0'		
Date Sampled			08/29/2017	08/29/2017	08/29/2017		
Date Prepared			08/30/2017	08/30/2017	08/30/2017		
Preparation Method			5030	5030	5030		
Date Analyzed			08/31/2017	08/31/2017	08/31/2017		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND		
Our Lab I.D.			**89157.14**	**89157.16**	**89157.17**		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
Bromofluorobenzene	75-125		100	109	108		

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Page: **5**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090117DB1

Our Lab I.D.			Method Blank	**89157.01**	**89157.02**	**89157.04**	**89157.05**
Client Sample I.D.				HA10-0.5'	HA10-2.0'	HA11-0.5'	HA11-2.0'
Date Sampled				08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			09/01/2017	09/01/2017	09/01/2017	09/01/2017	09/01/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/01/2017	09/01/2017	09/01/2017	09/01/2017	09/01/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	10.0	10.0	ND	ND	ND	ND	ND
TPH as Heavy Hydrocarbons (C23-C40)	100	100	ND	ND	ND	ND	ND
TPH Total as Diesel and Heavy HC.C13-C40	100	100	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**89157.01**	**89157.02**	**89157.04**	**89157.05**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		98.3	97.1	98.8	99.5	101

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Telephone: (909)274-1646
Attn: Christine Brendle
Page: 6

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090117DB1

Our Lab I.D.			89157.07	89157.08	89157.10	89157.11	89157.13
Client Sample I.D.			HA12-0.5'	HA12-2.0'	HA13-0.5'	HA13-2.0'	HA8-0.5'
Date Sampled			08/29/2017	08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			09/01/2017	09/01/2017	09/01/2017	09/01/2017	09/01/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/02/2017	09/02/2017	09/02/2017	09/02/2017	09/02/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	10.0	10.0	ND	ND	ND	ND	253
TPH as Heavy Hydrocarbons (C23-C40)	100	100	ND	ND	ND	ND	104
TPH Total as Diesel and Heavy HC.C13-C40	100	100	ND	ND	ND	ND	357
Our Lab I.D.			**89157.07**	**89157.08**	**89157.10**	**89157.11**	**89157.13**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		117	102	101	99.4	102

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Page: **7**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090117DB1

Our Lab I.D.			89157.14	89157.16	89157.17		
Client Sample I.D.			HA8-2.0'	HA7-0.5'	HA7-2.0'		
Date Sampled			08/29/2017	08/29/2017	08/29/2017		
Date Prepared			09/01/2017	09/01/2017	09/01/2017		
Preparation Method			3550B	3550B	3550B		
Date Analyzed			09/02/2017	09/02/2017	09/02/2017		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
TPH as Diesel (C13-C22)	10.0	10.0	ND	139	ND		
TPH as Heavy Hydrocarbons (C23-C40)	100	100	ND	ND	ND		
TPH Total as Diesel and Heavy HC.C13-C40	100	100	ND	154	ND		
Our Lab I.D.			89157.14	89157.16	89157.17		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
Chlorobenzene	75-125		99.8	103	98.2		

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ANALYTICAL RESULTS

Ordered By

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Telephone: (909)274-1646
Attn: Christine Brendle

Site

Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Page: **8**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3

Our Lab I.D.			Method Blank	89157.01	89157.02	89157.04	89157.05
Client Sample I.D.				HA10-0.5'	HA10-2.0'	HA11-0.5'	HA11-2.0'
Date Sampled				08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/31/2017	08/31/2017	08/31/2017	08/31/2017	08/31/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	89157.01	89157.02	89157.04	89157.05
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		116	120	103	107	122
Tetrachloro-m-xylene	30-150		90.3	89.4	84.6	80.6	87.8

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3

Our Lab I.D.			89157.07	89157.08	89157.10	89157.11	89157.13
Client Sample I.D.			HA12-0.5'	HA12-2.0'	HA13-0.5'	HA13-2.0'	HA8-0.5'
Date Sampled			08/29/2017	08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/31/2017	08/31/2017	08/31/2017	08/31/2017	08/31/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			**89157.07**	**89157.08**	**89157.10**	**89157.11**	**89157.13**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		121	86.9	125	111	120
Tetrachloro-m-xylene	30-150		94.0	63.0	113	93.4	120

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3

Our Lab I.D.			89157.14	89157.16	89157.17		
Client Sample I.D.			HA8-2.0'	HA7-0.5'	HA7-2.0'		
Date Sampled			08/29/2017	08/29/2017	08/29/2017		
Date Prepared			08/30/2017	08/30/2017	08/30/2017		
Preparation Method			3550B	3550B	3550B		
Date Analyzed			08/31/2017	09/01/2017	09/01/2017		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND		
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND		
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND		
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND		
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND		
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND		
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND		
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND		
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND		
Our Lab I.D.			89157.14	89157.16	89157.17		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
Decachlorobiphenyl	30-150		110	144	117		
Tetrachloro-m-xylene	30-150		97.6	137	94.0		

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3C

Our Lab I.D.			Method Blank	89157.19	89157.20	89157.21	89157.22
Client Sample I.D.				C1	C2	C3	C4
Date Sampled				08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/31/2017	09/01/2017	09/01/2017	09/01/2017	09/01/2017
Matrix			Solid	Solid	Solid	Solid	Solid
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	89157.19	89157.20	89157.21	89157.22
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		116	120	122	118	121
Tetrachloro-m-xylene	30-150		90.3	126	124	116	128

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3C

Our Lab I.D.			**89157.23**				
Client Sample I.D.			C5				
Date Sampled			08/29/2017				
Date Prepared			08/30/2017				
Preparation Method			3550B				
Date Analyzed			09/01/2017				
Matrix			Solid				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Aroclor-1016 (PCB-1016)	1.0	1.0	ND				
Aroclor-1221 (PCB-1221)	1.0	1.0	ND				
Aroclor-1232 (PCB-1232)	1.0	1.0	ND				
Aroclor-1242 (PCB-1242)	1.0	1.0	ND				
Aroclor-1248 (PCB-1248)	1.0	1.0	ND				
Aroclor-1254 (PCB-1254)	1.0	1.0	ND				
Aroclor-1260 (PCB-1260)	1.0	1.0	ND				
Aroclor-1262 (PCB-1262)	1.0	1.0	ND				
Aroclor-1268 (PCB-1268)	1.0	1.0	ND				
Our Lab I.D.			**89157.23**				
Surrogates	**%Rec.Limit**		**% Rec.**				
Decachlorobiphenyl	30-150		125				
Tetrachloro-m-xylene	30-150		119				

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0830172C3

Our Lab I.D.			Method Blank	89157.01	89157.02	89157.04	89157.05
Client Sample I.D.				HA10-0.5'	HA10-2.0'	HA11-0.5'	HA11-2.0'
Date Sampled				08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/31/2017	08/31/2017	08/31/2017	08/31/2017	08/31/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	ND	ND
Barium	5.0	5.0	ND	103	106	113	106
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	ND	17.9	17.9	19.2	18.9
Cobalt	5.0	5.0	ND	7.45	7.95	7.96	8.18
Copper	5.0	5.0	ND	21.8	22.1	22.0	22.3
Lead	5.0	5.0	ND	ND	ND	ND	ND
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	ND	14.4	14.7	15.9	15.1
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	ND	33.1	33.3	34.6	33.8
Zinc	5.0	5.0	ND	38.6	39.2	42.0	40.6

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0830172C3

Our Lab I.D.			89157.07	89157.08	89157.10	89157.11	89157.13
Client Sample I.D.			HA12-0.5'	HA12-2.0'	HA13-0.5'	HA13-2.0'	HA8-0.5'
Date Sampled			08/29/2017	08/29/2017	08/29/2017	08/29/2017	08/29/2017
Date Prepared			08/30/2017	08/30/2017	08/30/2017	08/30/2017	08/30/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/31/2017	08/31/2017	08/31/2017	08/31/2017	08/31/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	3.03	3.29	ND	ND	ND
Barium	5.0	5.0	116	110	108	128	138
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	19.7	18.3	19.1	22.3	18.5
Cobalt	5.0	5.0	8.43	7.79	7.68	8.42	8.28
Copper	5.0	5.0	23.5	22.9	23.5	23.0	22.4
Lead	5.0	5.0	ND	ND	ND	ND	5.04
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	15.2	14.7	14.7	16.9	15.0
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	36.8	35.3	34.0	39.3	34.0
Zinc	5.0	5.0	40.0	40.9	47.4	45.7	52.7

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0830172C3

Our Lab I.D.			89157.14	89157.16	89157.17		
Client Sample I.D.			HA8-2.0'	HA7-0.5'	HA7-2.0'		
Date Sampled			08/29/2017	08/29/2017	08/29/2017		
Date Prepared			08/30/2017	08/30/2017	08/30/2017		
Preparation Method			3050B	3050B	3050B		
Date Analyzed			08/31/2017	08/31/2017	08/31/2017		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Antimony	5.0	5.0	ND	ND	ND		
Arsenic	2.5	2.5	ND	ND	ND		
Barium	5.0	5.0	129	117	114		
Beryllium	2.5	2.5	ND	ND	ND		
Cadmium	2.5	2.5	ND	ND	ND		
Chromium	5.0	5.0	16.8	16.9	15.5		
Cobalt	5.0	5.0	8.00	6.87	7.81		
Copper	5.0	5.0	20.5	22.5	19.2		
Lead	5.0	5.0	ND	5.28	ND		
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND		
Molybdenum	5.0	5.0	ND	ND	ND		
Nickel	5.0	5.0	14.0	12.2	12.5		
Selenium	5.0	5.0	ND	ND	ND		
Silver	5.0	5.0	ND	ND	ND		
Thallium	5.0	5.0	ND	ND	ND		
Vanadium	5.0	5.0	31.8	31.0	29.6		
Zinc	5.0	5.0	39.2	54.0	36.6		

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Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0830172C3; Dup or Spiked Sample: 89157.01; LCS: Clean Sand; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Antimony	0.00	50.0	51.5	103	50.0	50.5	101	2.0	75-125	<15
Arsenic	0.00	50.0	51.0	102	50.0	50.5	101	<1	75-125	<15
Barium	103	50.0	153	100	50.0	152	98.0	2.0	75-125	<15
Beryllium	0.00	50.0	55.5	111	50.0	55.5	111	<1	75-125	<15
Cadmium	0.00	50.0	52.0	104	50.0	51.5	103	<1	75-125	<15
Chromium	17.9	50.0	67.9	100	50.0	67.6	99.4	<1	75-125	<15
Cobalt	7.45	50.0	56.4	97.9	50.0	56.1	97.3	<1	75-125	<15
Copper	21.8	50.0	76.8	110	50.0	76.3	109	<1	75-125	<15
Lead	0.00	50.0	47.0	94.0	50.0	46.8	93.6	<1	75-125	<15
Mercury (By EPA 7471)	0.00	0.500	0.369M	73.8	0.500	0.393	78.6	6.3	75-125	<15
Molybdenum	0.00	50.0	49.8	99.6	50.0	49.5	99.0	<1	75-125	<15
Nickel	14.4	50.0	61.7	94.6	50.0	61.3	93.8	<1	75-125	<15
Selenium	0.00	50.0	42.9	85.8	50.0	40.6	81.2	5.5	75-125	<15
Silver	0.00	50.0	49.4	98.8	50.0	49.3	98.6	<1	75-125	<15
Thallium	0.00	50.0	41.7	83.4	50.0	41.3	82.6	<1	75-125	<15
Vanadium	33.1	50.0	83.6	101	50.0	83.6	101	<1	75-125	<15
Zinc	38.6	50.0	85.1	93.0	50.0	84.6	92.0	1.1	75-125	<15

QC Batch No: 0830172C3; Dup or Spiked Sample: 89157.01; LCS: Clean Sand; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Antimony	50.0	52.0	104	50.0	52.5	105	<1	75-125	<15	
Arsenic	50.0	52.0	104	50.0	52.5	105	<1	75-125	<15	
Barium	50.0	53.5	107	50.0	52.5	105	1.9	75-125	<15	
Beryllium	50.0	57.5	115	50.0	57.0	114	<1	75-125	<15	
Cadmium	50.0	54.5	109	50.0	53.5	107	1.9	75-125	<15	
Chromium	50.0	53.5	107	50.0	53.5	107	<1	75-125	<15	
Cobalt	50.0	53.5	107	50.0	52.5	105	1.9	75-125	<15	
Copper	50.0	54.5	109	50.0	52.5	105	3.7	75-125	<15	
Lead	50.0	51.0	102	50.0	51.0	102	<1	75-125	<15	

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QUALITY CONTROL RESULTS

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0830172C3; Dup or Spiked Sample: 89157.01; LCS: Clean Sand; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Mercury (By EPA 7471)	0.500	0.425	84.9	0.500	0.429	85.7	<1	75-125	<15	
Molybdenum	50.0	51.0	102	50.0	51.5	103	<1	75-125	<15	
Nickel	50.0	52.0	104	50.0	51.5	103	<1	75-125	<15	
Selenium	50.0	53.0	106	50.0	53.5	107	<1	75-125	<15	
Silver	50.0	54.0	108	50.0	53.0	106	1.9	75-125	<15	
Thallium	50.0	53.5	107	50.0	53.5	107	<1	75-125	<15	
Vanadium	50.0	53.5	107	50.0	52.5	105	1.9	75-125	<15	
Zinc	50.0	55.0	110	50.0	55.5	111	<1	75-125	<15	

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QUALITY CONTROL RESULTS

Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Site

Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Telephone: (909)274-1646
Attn: Christine Brendle
Page: **18**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3; Dup or Spiked Sample: 89157.21; LCS: Clean Sand; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	0.500	0.402	80.4	0.500	0.471	94.2	15.8	50-150	<20
Aroclor-1260 (PCB-1260)	0.00	0.500	0.635	127	0.500	0.700	140	9.7	50-150	<20
Surrogates										
Decachlorobiphenyl	0.00	0.0500	0.0630	126	0.0500	0.0570	114	10.0	30-150	<20
Tetrachloro-m-xylene	0.00	0.0500	0.0570	114	0.0500	0.0580	116	1.7	30-150	<20

QC Batch No: 083017-3; Dup or Spiked Sample: 89157.21; LCS: Clean Sand; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	0.500	0.580	116	0.500	0.615	123	5.9	50-150	<20	
Aroclor-1260 (PCB-1260)	0.500	0.675	135	0.500	0.525	105	25.0	50-150	<20	
Surrogates										
Decachlorobiphenyl	0.0500	0.0540	108	0.0500	0.0570	114	5.4	30-150	<20	
Tetrachloro-m-xylene	0.0500	0.0590	118	0.0500	0.0640	128	8.1	30-150	<20	

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Attn: Christine Brendle

Site

Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Page: **19**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090117DB1; Dup or Spiked Sample: 89157.07; LCS: Clean Sand; QC Prepared: 09/01/2017;MS Analyzed: 09/02/2017; LCS Analyzed: 09/01/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Diesel (C13-C22)	0.00	500	510	102	500	530	106	3.8	75-125	<20
Surrogates										
Chlorobenzene	0.00	100	98.7	98.7	100	104	104	5.2	75-125	<20

QC Batch No: 090117DB1; Dup or Spiked Sample: 89157.07; LCS: Clean Sand; QC Prepared: 09/01/2017;MS Analyzed: 09/02/2017; LCS Analyzed: 09/01/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Diesel (C13-C22)	500	525	105	500	545	109	3.7	75-125	<20	
Surrogates										
Chlorobenzene	100	99.7	99.7	100	102	102	2.3	75-125	<20	

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Telephone: (909)274-1646
Attn: Christine Brendle
Page: **20**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 083017NB1; Dup or Spiked Sample: 89157.01AGA; LCS: Clean Sand; QC Prepared: 08/30/2017;MS Analyzed: 08/31/2017; LCS Analyzed: 08/30/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Gasoline and Light HC. (C4-C12)	0.00	1.00	0.790	79.3	1.00	0.790	79.4	<1	75-125	<20
Surrogates										
Bromofluorobenzene	0.00	0.0500	0.0526	105	0.0500	0.0510	102	2.86	75-125	<20

QC Batch No: 083017NB1; Dup or Spiked Sample: 89157.01AGA; LCS: Clean Sand; QC Prepared: 08/30/2017;MS Analyzed: 08/31/2017; LCS Analyzed: 08/30/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Gasoline and Light HC. (C4-C12)	1.00	0.840	84.3	1.00	0.790	79.1	6.36	75-125	<20	
Surrogates										
Bromofluorobenzene	0.0500	0.0512	102	0.0500	0.0506	101	<1	75-125	<20	

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City of Industry, CA 91745

Telephone: (909)274-1646
Attn: Christine Brendle
Page: **21**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 083017-3C; Dup or Spiked Sample: 89157.21; LCS: Blank; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	0.500	0.402	80.4	0.500	0.471	94.2	15.8	50-150	<20
Aroclor-1260 (PCB-1260)	0.00	0.500	0.635	127	0.500	0.700	140	9.7	50-150	<20
Surrogates										
Decachlorobiphenyl	0.00	0.0500	0.0630	126	0.0500	0.0570	114	10.0	30-150	<20
Tetrachloro-m-xylene	0.00	0.0500	0.0570	114	0.0500	0.0580	116	1.7	30-150	<20

QC Batch No: 083017-3C; Dup or Spiked Sample: 89157.21; LCS: Blank; QC Prepared: 08/30/2017; QC Analyzed: 08/31/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	0.500	0.580	116	0.500	0.615	123	5.9	50-150	<20	
Aroclor-1260 (PCB-1260)	0.500	0.675	135	0.500	0.525	105	25.0	50-150	<20	
Surrogates										
Decachlorobiphenyl	0.0500	0.0540	108	0.0500	0.0570	114	5.4	30-150	<20	
Tetrachloro-m-xylene	0.0500	0.0590	118	0.0500	0.0640	128	8.1	30-150	<20	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above PQL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

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Ordered By

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1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Number of Pages	**5**
Date Received	**08/29/2017**
Date Reported	**09/06/2017**

Job Number	Order Date	Client
89157	08/29/2017	SCE

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's
Site: Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Enclosed please find results of analyses of 1 soil sample which was analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.

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CHAIN OF CUSTODY RECORD

102214

EPA 8010B / 7471A

AETL JOB No. 89157

Page 1 of 2

COMPANY: Northgate for SCE / SCE
PROJECT MANAGER: Christine Brenate / Joni Fisher / Northgate
COMPANY ADDRESS: 24411 Ridge Route Dr., Laguna Hills
PHONE: (949) 310-6024
FAX:
PROJECT NAME: Walnut sub 220kV CBs
PROJECT #: IO# 337440 SAP# 900772538
SITE NAME AND ADDRESS: Walnut Substation, 16333 Gale Ave., City of Industry
PO #:

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	PCBs - EPA 8082	TPH - EPA 8015B	Title 22 Metals	VOCs - EPA 8260B	TEST INSTRUCTIONS & COMMENTS
1	HA10-0.5'	89157.01	8/29/17	0640	Soil	1x8-oz Jar	Ice	X	X	X		PQL for PCBs = 1.0 mg/kg
2	HA10-2.0'	89157.02		0645				X	X	X		Analyze for VOCs only if TPH detected, then only on sample with highest TPH.
3	HA10-5.0'	89157.03		0700								HOLD
4	HA11-0.5'	89157.04		0710				X	X	X		
5	HA11-2.0'	89157.05		0715				X	X	X		
6	HA11-5.0'	89157.06		0730								HOLD
7	HA12-0.5'	89157.07		0745				X	X	X		
8	HA12-2.0'	89157.08		0750				X	X	X		
9	HA12-5.0'	89157.09		0800								HOLD
10	HA13-0.5'	89157.10		0830				X	X	X		
11	HA13-2.0'	89157.11		0850				X	X	X		
12	HA13-5.0'	89157.12		0900								HOLD
13	HA8-0.5'	89157.13		0925				X	X	X	*	
14	HA8-2.0'	89157.14		0930				X	X	X		
15	HA8-5.0'	89157.15		0945								HOLD

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	15	PROPERLY COOLED (Y) N / NA	
CUSTODY SEALS Y / (N) NA		SAMPLES INTACT (Y) N / NA	
RECEIVED IN GOOD COND (Y) N		SAMPLES ACCEPTED (Y) N	

TURN AROUND TIME

(X) NORMAL ( ) RUSH
( ) SAME DAY
( ) NEXT DAY
( ) 2 DAYS
( ) 3 DAYS
5 DAY

DATA DELIVERABLE REQUIRED

( ) HARD COPY
( ) PDF
( ) GEOTRACKER (GLOBAL ID) _____
( ) OTHER (PLEASE SPECIFY) _____

	RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature:	CEM		
Printed Name:	CEM KAMALI		Angelis P
Date / Time:	8/29/17 1510		8/29/17 1759
	RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY LABORATORY: AETL 3.**
Signature:			
Printed Name:	Sanchez		Andi
Date / Time:	8/29/17 1510		8/29/17 1730

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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COOLER RECEIPT FORM

Client Name: Edison

Project Name:

AETL Job Number: 89157

Date Received: 08/29/17 Received by: Antin

Carrier: ☒ AETL Courier ☐ Client ☐ GSO ☐ FedEx ☐ UPS

☐ Others:

Samples were received in: ☒ Cooler (/) ☐ Other (Specify):

Inside temperature of shipping container No 1: 3-2°, No 2: _____, No 3: _____

Type of sample containers: ☐ VOA, ☐ Glass bottles, ☒ Wide mouth jars, ☐ HDPE bottles, ☐ Metal sleeves, ☐ Others (Specify):

How are samples preserved: ☐ None, ☒ Ice, ☐ Blue Ice, ☐ Dry Ice

☒ None, _ HNO_3, _ NaOH, _ ZnOAc, _ HCl, _ $Na_2S_2O_3$, _ MeOH

_ Other (Specify):

	Yes	No, explain below	Name, if client was notified.
1. Are the COCs Correct?	✓		
2. Are the Sample labels legible?	✓		
3. Do samples match the COC?	✓		
4. Are the required analyses clear?	✓		
5. Is there enough samples for required analysis?	✓		
6. Are samples sealed with evidence tape?		✓	
7. Are sample containers in good condition?	✓		
8. Are samples preserved?	✓		
9. Are samples preserved properly for the intended analysis?	✓		
10. Are the VOAs free of headspace?	N/A		
11. Are the jars free of headspace?	✓		

Explain all "No" answers for above questions:

Cyrus Razmara

From: Cem Kamali [cem.kamali@ngem.com]
Sent: Wednesday, September 6, 2017 3:25 PM
To: Cyrus Razmara
Cc: Christine Brendle; Joni Fisher
Subject: Re: FW: Results of analysis, AETL Job No.: 89157 (In NEW Summary Table and PDF formats) of 12 soil and 5 concrete samples from "Walnut Substation, 220KV CBs, IO # 337440, SAP # 900772538"

Hello Cyrus,

Thank you for the results for Walnut Substation. Yes, please go ahead with VOCs analysis on sample HA8-0.5' identified in your email above.

Thanks,
Cem

On Wed, Sep 6, 2017 at 3:06 PM, Cyrus Razmara <cyrus@aetlab.com> wrote:

Hello Cem,

Due to the high TPH results, do you want VOC on sample HA8-0.5' (89157.13) ?

If you have any questions, please call me at 888-288-AETL.

Cyrus Razmara Ph.D.

CEO & Laboratory Director

American Environmental Testing Laboratory

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Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337440
Date Received 08/29/2017
Date Reported 09/06/2017

Job Number	Order Date	Client
89157	08/29/2017	SCE

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 23 samples with the following specification on 08/29/2017.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89157.01	HA10-0.5'	08/29/2017	Soil	1
89157.02	HA10-2.0'	08/29/2017	Soil	1
89157.04	HA11-0.5'	08/29/2017	Soil	1
89157.05	HA11-2.0'	08/29/2017	Soil	1
89157.07	HA12-0.5'	08/29/2017	Soil	1
89157.08	HA12-2.0'	08/29/2017	Soil	1
89157.10	HA13-0.5'	08/29/2017	Soil	1
89157.11	HA13-2.0'	08/29/2017	Soil	1
89157.14	HA8-2.0'	08/29/2017	Soil	1
89157.16	HA7-0.5'	08/29/2017	Soil	1
89157.17	HA7-2.0'	08/29/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(6010B/7000CAM) ^ SCE	09/05/2017	2	Normal	mg/Kg
(8082) ^ SCE-1PPM	09/05/2017	2	Normal	mg/Kg
(M8015D) ^ SCE-C13C40	09/05/2017	2	Normal	mg/Kg
(M8015G) ^ SCE-C4-C12	09/05/2017	2	Normal	mg/Kg

89157.03	HA10-5.0'	08/29/2017	Soil	1
89157.06	HA11-5.0'	08/29/2017	Soil	1
89157.09	HA12-5.0'	08/29/2017	Soil	1
89157.12	HA13-5.0'	08/29/2017	Soil	1
89157.15	HA8-5.0'	08/29/2017	Soil	1
89157.18	HA7-5.0'	08/29/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
ARCHIVE	09/05/2017	2	Normal	--

89157.13	HA8-0.5'	08/29/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units

Continued

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Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337440
Date Received 08/29/2017
Date Reported 09/06/2017

Job Number	Order Date	Client
89157	08/29/2017	SCE

CERTIFICATE OF ANALYSIS

CASE NARRATIVE

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89157.13	HA8-0.5'	08/29/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(6010B/7000CAM) ^ SCE	09/05/2017	2	Normal	mg/Kg
(8082) ^ SCE-1PPM	09/05/2017	2	Normal	mg/Kg
(8260B)	09/05/2017	2	Normal	ug/Kg
(M8015D) ^ SCE-C13C40	09/05/2017	2	Normal	mg/Kg
(M8015G) ^ SCE-C4-C12	09/05/2017	2	Normal	mg/Kg

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89157.19	C1	08/29/2017	Solid	1
89157.20	C2	08/29/2017	Solid	1
89157.21	C3	08/29/2017	Solid	1
89157.22	C4	08/29/2017	Solid	1
89157.23	C5	08/29/2017	Solid	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8082) ^ SCE-1PPM	09/05/2017	2	Normal	mg/Kg

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
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ANALYTICAL RESULTS

Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Site

Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Telephone: (909)274-1646
Attn: Christine Brendle
Page: **2**

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0906172A1

Our Lab I.D.			Method Blank	**89157.13**			
Client Sample I.D.				HA8-0.5'			
Date Sampled				08/29/2017			
Date Prepared			09/06/2017	09/06/2017			
Preparation Method			5030	5030			
Date Analyzed			09/06/2017	09/06/2017			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acetone	25	50	ND	ND			
Benzene	1.0	10.0	ND	ND			
Bromobenzene (Phenyl bromide)	5.0	10.0	ND	ND			
Bromochloromethane	5.0	10.0	ND	ND			
Bromodichloromethane	5.0	10.0	ND	ND			
Bromoform (Tribromomethane)	25	50	ND	ND			
Bromomethane (Methyl bromide)	15	30	ND	ND			
2-Butanone (MEK)	25	50	ND	ND			
n-Butylbenzene	5.0	10.0	ND	ND			
sec-Butylbenzene	5.0	10.0	ND	ND			
tert-Butylbenzene	5.0	10.0	ND	ND			
Carbon Disulfide	25	50	ND	ND			
Carbon tetrachloride	5.0	10.0	ND	ND			
Chlorobenzene	5.0	10.0	ND	ND			
Chloroethane	15	30	ND	ND			
2-Chloroethyl vinyl ether	50	50	ND	ND			
Chloroform (Trichloromethane)	5.0	10.0	ND	ND			
Chloromethane (Methyl chloride)	15	30	ND	ND			
2-Chlorotoluene	5.0	10.0	ND	ND			
4-Chlorotoluene	5.0	10.0	ND	ND			
1,2-Dibromo-3-chloropropane (DBCP)	25	50	ND	ND			
Dibromochloromethane	5.0	10.0	ND	ND			
1,2-Dibromoethane (EDB)	5.0	10.0	ND	ND			
Dibromomethane	5.0	10.0	ND	ND			
1,2-Dichlorobenzene	5.0	10.0	ND	ND			
1,3-Dichlorobenzene	5.0	10.0	ND	ND			
1,4-Dichlorobenzene	5.0	10.0	ND	ND			
Dichlorodifluoromethane	15	30	ND	ND			

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ANALYTICAL RESULTS

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0906172A1

Our Lab I.D.			Method Blank	**89157.13**			
Client Sample I.D.				HA8-0.5'			
Date Sampled				08/29/2017			
Date Prepared			09/06/2017	09/06/2017			
Preparation Method			5030	5030			
Date Analyzed			09/06/2017	09/06/2017			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
1,1-Dichloroethane	5.0	10.0	ND	ND			
1,2-Dichloroethane (EDC)	5.0	10.0	ND	ND			
1,1-Dichloroethene	5.0	10.0	ND	ND			
cis-1,2-Dichloroethene	5.0	10.0	ND	ND			
trans-1,2-Dichloroethene	5.0	10.0	ND	ND			
1,2-Dichloropropane	5.0	10.0	ND	ND			
1,3-Dichloropropane	5.0	10.0	ND	ND			
2,2-Dichloropropane	5.0	10.0	ND	ND			
1,1-Dichloropropene	5.0	10.0	ND	ND			
cis-1,3-Dichloropropene	5.0	10.0	ND	ND			
trans-1,3-Dichloropropene	5.0	10.0	ND	ND			
Ethylbenzene	1.0	10.0	ND	ND			
Hexachlorobutadiene	15	30	ND	ND			
2-Hexanone	25	50	ND	ND			
Iodomethane	5.0	10.0	ND	ND			
Isopropylbenzene	5.0	10.0	ND	ND			
p-Isopropyltoluene	5.0	10.0	ND	ND			
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND			
Methyl-tert-butyl ether (MTBE)	2.0	10.0	ND	ND			
Methylene chloride (DCM)	25	50	ND	ND			
Naphthalene	5.0	10.0	ND	ND			
n-Propylbenzene	5.0	10.0	ND	ND			
Styrene	5.0	10.0	ND	ND			
1,1,1,2-Tetrachloroethane	5.0	10.0	ND	ND			
1,1,2,2-Tetrachloroethane	5.0	10.0	ND	ND			
Tetrachloroethene	2.0	10.0	ND	ND			
Toluene (Methyl benzene)	1.0	10.0	ND	ND			
1,2,3-Trichlorobenzene	5.0	10.0	ND	ND			
1,2,4-Trichlorobenzene	5.0	10.0	ND	ND			
1,1,1-Trichloroethane	5.0	10.0	ND	ND			
1,1,2-Trichloroethane	5.0	10.0	ND	ND			
Trichloroethene	1.5	10.0	ND	ND			
Trichlorofluoromethane	5.0	10.0	ND	ND			
1,2,3-Trichloropropane	5.0	10.0	ND	ND			

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ANALYTICAL RESULTS

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0906172A1

Our Lab I.D.			Method Blank	**89157.13**			
Client Sample I.D.				HA8-0.5'			
Date Sampled				08/29/2017			
Date Prepared			09/06/2017	09/06/2017			
Preparation Method			5030	5030			
Date Analyzed			09/06/2017	09/06/2017			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
1,2,4-Trimethylbenzene	5.0	10.0	ND	ND			
1,3,5-Trimethylbenzene	5.0	10.0	ND	ND			
Vinyl Acetate	25	50	ND	ND			
Vinyl chloride (Chloroethene)	5.0	10.0	ND	ND			
o-Xylene	1.0	10.0	ND	ND			
m,p-Xylenes	1.0	20.0	ND	ND			
Our Lab I.D.			Method Blank	**89157.13**			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
Bromofluorobenzene	75-125		81.4	98.4			
Dibromofluoromethane	75-125		125	125			
Toluene-d8	75-125		97.7	98.3			

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QUALITY CONTROL RESULTS

Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Site

Walnut Substation
16333 Gale Ave.
City of Industry, CA 91745

Telephone: (909)274-1646
Attn: Christine Brendle
Page: 5

Project ID: IO# 337440
Project Name: Walnut Sub. 220KV CB's

AETL Job Number	Submitted	Client
89157	08/29/2017	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0906172A1; LCS: Clean Sand; LCS Prepared: 09/06/2017; LCS Analyzed: 09/06/2017; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Benzene	50.0	40.8	81.6	50.0	38.0	76.0	7.1	75-125	<20	
Carbon tetrachloride	50.0	62.5	125	50.0	62.5	125	<1	75-125	<20	
Chlorobenzene	50.0	43.8	87.6	50.0	43.0	86.0	1.8	75-125	<20	
Chloroform (Trichloromethane)	50.0	55.5	111	50.0	52.5	105	5.6	75-125	<20	
1,2-Dichlorobenzene	50.0	50.5	101	50.0	49.0	98.0	3.0	75-125	<20	
1,1-Dichloroethane	50.0	39.6	79.2	50.0	42.0	84.0	5.9	75-125	<20	
1,1-Dichloroethene	50.0	53.0	106	50.0	54.0	108	1.9	75-125	<20	
cis-1,2-Dichloroethene	50.0	41.9	83.8	50.0	42.5	85.0	1.4	75-125	<20	
Ethylbenzene	50.0	46.3	92.6	50.0	45.5	91.0	1.7	75-125	<20	
Methyl-tert-butyl ether (MTBE)	50.0	52.0	104	50.0	53.0	106	1.9	75-125	<20	
n-Propylbenzene	50.0	44.8	89.6	50.0	45.0	90.0	<1	75-125	<20	
Toluene (Methyl benzene)	50.0	41.5	83.0	50.0	40.5	81.0	2.4	75-125	<20	
1,1,1-Trichloroethane	50.0	62.5	125	50.0	62.5	125	<1	75-125	<20	
1,1,2-Trichloroethane	50.0	54.5	109	50.0	52.0	104	4.7	75-125	<20	
Trichloroethene	50.0	51.0	102	50.0	49.0	98.0	4.0	75-125	<20	
1,2,4-Trimethylbenzene	50.0	49.2	98.4	50.0	48.5	97.0	1.4	75-125	<20	
1,3,5-Trimethylbenzene	50.0	47.5	95.0	50.0	47.0	94.0	1.1	75-125	<20	
o-Xylene	50.0	43.6	87.2	50.0	42.0	84.0	3.7	75-125	<20	
m,p-Xylenes	100	88.3	88.3	100	85.5	85.5	3.2	75-125	<20	
Surrogates										
Bromofluorobenzene	50.0	48.1	96.1	50.0	51.0	102	6.0	75-125	<20	
Dibromofluoromethane	50.0	51.5	103	50.0	50.0	100	3.0	75-125	<20	
Toluene-d8	50.0	45.5	90.9	50.0	46.5	93.0	2.3	75-125	<20	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

American Environmental Testing Laboratory Inc.
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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above PQL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

Waste Profile #	Expiration Date
5123188293	12/28/2018

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Aerocraft Heat Treating

Generator Site Address: 15701 Minnesota Ave

City: Paramount **County:** **State:** CA **Zip:**

Name of Waste: Furnace Insulation

Estimated Annual Volume: 25 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 5/22/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 5/22/2018

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: 5123 Sunshine Canyon Landfill, CA — Select a Facility ---

Waste Profile #
5123 18 8293
Sales Rep #: 585 - Ed Antolin

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: AEROCRAFT HEAT TREATING			
Generator Site Address: 15701 MINNESOTA AVE			
City: PARAMOUNT	County: LA	State: California	Zip: 90723
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☐ 15701 MINNESOTA AVE			
City: PARAMOUNT	County:	State: California	Zip: 90723
Generator Contact Name: CARLOS RUIZ		Email:	
Phone Number: (562) 412-2434	Ext:	Fax Number:	

II. Billing Information

Bill To: ENVIRONMENTAL MANAGEMENT TECHNOLOGIES		Contact Name: MARIA	
Billing Address: 1456 S. GAGE STREET		Email: MARIA@EMT4ENV.COM	
City: SAN BERNARDINO	State: CA	Zip: 92408	Phone: (800) 579-6834

III. Waste Stream Information

Name of Waste: FURNACE INSULATION	
Process Generating Waste: FURNACE INSULATION CHANGE OUT	
Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	25 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification ☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☑ GRAB SAMPLE	
Sample Date: ~~1/23/2018~~ 1/23/2018 12/13/2017	
Sample ID Numbers: T180264-01 ST-11578 - 01	

Waste Profile #
5123 18 8293

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. INSULATION WITH METALS (SEE ANALYSIS)	100%
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
GREYISH	NONE	☐ YES or ☑ NO	100%	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Juan Carlos Ruiz EHS Coordinator
Authorized Representative Name And Title (Type or Print)

Aerocraft Heat Treating
Company Name

Juan Carlos Ruiz
Authorized Representative Signature

05/21/18
Date

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611
805-399-0060

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Aerocraft Heat Treating	**Report date:**	12/28/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/28/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

ANALYSES REQUESTED

1. STLC Waste Extraction Test by ICP-OES

   Additional analysis requested on December 22, 2017.

Approval:

Carolyn Carroll
Stationary Lab Manager

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611
805-399-0060

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Aerocraft Heat Treating	**Report date:**	12/28/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/28/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

Sample ID: **Waste Inswool Ceramic Fiber** **JEL ID:** **ST-11578-01**

STLC Waste Extraction Test by ICP-OES

	Result	Dilution	Batch	Prepared	Analyzed	Practical Quantitation Limit	Units
Analytes:							
Chromiun, Cr	**0.9**	1	STLC12261701	12/26/2017	12/28/2017	0.5	mg/L
Nickel, Ni	**1.1**	1	"	"	"	0.5	mg/L

ND= Not Detected

JONES ENVIRONMENTAL, INC.
714-449-9937
562-646-1611
805-399-0060
11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Aerocraft Heat Treating	**Report date:**	12/28/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/28/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

BATCH: **STLC12261701** **Prepared:** 12/26/2017 **Analyzed:** 12/28/2017

STLC Waste Extraction Test by ICP-OES

	Result	Spike Level	Source Result	% Recovery	% RPD	% Recovery Limits	Units
METHOD BLANK:	**STLC122617-BLK1**						
Analyte:							
Chromium, Cr	ND						mg/L
Nickel, Ni	ND						mg/L
LCS:	**STLC122617-LCS1**						
Analyte:							
Chromium, Cr	**4.8**	5.0		96%		80 - 120	mg/L
Nickel, Ni	**5.1**	5.0		102%		80 - 120	mg/L
LCSD:	**STLC122617-LCSD1**						
Analyte:							
Chromium, Cr	**4.7**	5.0		94%	2.1%	80 - 120	mg/L
Nickel, Ni	**5.0**	5.0		100%	2.0%	80 - 120	mg/L

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

Chain-of-Custody Record

JONES ENVIRONMENTAL, INC.
P.O. Box 5387
Fullerton, CA 92838
(714) 449-9937
Fax (714) 449-9685
www.jonesenvironmentallab.com

Client: Aerocraft Heat Treating
Date: 12/13/2017
Project Name:
Client Project #:
Project Address: 15701 Minnesota Avenue, Paramount, CA. 90280
Email: juan.c.ruiz@dicksontesting.com
Phone: 562 412 2434
Report To: Juan Carlos Ruiz
Sampler:

Report Options
Tier I - (Results/Default) ____ Tier III - (Data Validation Package) 10% Surcharge____
Tier II - (Results + QC) ____ Tier IV - (Client specified) 10% Surcharge ____
EDD ____ EDF ____

JEL Project # ST-11578

Page 1 of 1

Lab Use Only
Sample Condition as Recieved:
Chilled ☐ yes ☐ no
Sealed ☐ yes ☐ no

Turn Around Requested:
- ☐ Immediate Attention
- ☐ Rush 24-48 Hours
- ☐ Rush 72-96 Hours
- ☒ Normal
- ☐ Mobile Lab

Tracer:
- ☐ n-propanol
- ☐ n-pentane
- ☐ 1,1-DFA
- ☐ Helium
- ☐ _____

Shut In Test Y / N

Purge Number
☐ 1P ☐ 3P ☐ 7P ☐ 10P

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Preservative	Date of Preservative	Container Type(s)	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas	CAM-17	TCLP- Chromium	STLC - Cr, Ni (12/22)			Magnehelic Reading (in/H2O)	Number of Containers	Remarks & Special Instructions
Waste Inswool Ceramic Fiber			12/13/17	09:00am		ST-11578-01			GLASS	S	X		X				1	
Inspection Baghouse Dust			12/13/17	08:30am		ST-11578-02			Poly	S		X					1	

Relinquished By (Signature):	Date: 12/15/17	Received By (Signature):	Date: 12/15
Company: Aerocraft Heat Treating	Time: 8:50 am	Company: JEL	Time: 0850
Relinquished By (Signature):	Date:	Received By (Signature):	Date:
Company	Time:	Company	Time:
Relinquished By (Signature):	Date:	Received By (Signature):	Date:
Company	Time:	Company	Time:

2 Total Number of Containers

The delivery of samples and the signature on this Chain of Custody form constitutes authorization to perform the analyses specificied above under the Terms and Conditions set forth

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611
805-399-0060

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:	Aerocraft Heat Treating	**Report date:**	12/21/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/19,20/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

ANALYSES REQUESTED

1. EPA 6010B by 3050B and EPA 7471A – CAM 17 Metals

Approval:

Colby Wakeman
QA/QC Manager

JONES ENVIRONMENTAL, INC.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Aerocraft Heat Treating	**Report date:**	12/21/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/18-20/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

Sample ID: **Waste Inswool Ceramic Fiber** **JEL ID:** **ST-11578-01**

EPA 6010B by 3050B - Title 22 CAM 17 Trace Metals by ICP-OES

Analytes:	Result	Dilution	Batch	Prepared	Analyzed	Practical Quantitation Limit	Units
Silver, Ag	ND	1	I17121802	12/18/2017	12/19/2017	0.5	mg/kg
Arsenic, As	**0.8**	1	"	"	"	0.5	mg/kg
Barium, Ba	**12.3**	1	"	"	"	0.5	mg/kg
Beryllium, Be	ND	1	"	"	"	0.5	mg/kg
Cadmium, Cd	ND	1	"	"	"	0.5	mg/kg
Cobalt, Co	**35.9**	1	"	"	"	0.5	mg/kg
Chromium, Cr	**298**	1	"	"	"	0.5	mg/kg
Copper, Cu	**78.0**	1	"	"	"	0.5	mg/kg
Molybdenum, Mo	**1250**	10	"	"	12/20/2017	5.0	mg/kg
Nickel, Ni	**392**	1	"	"	12/19/2017	0.5	mg/kg
Lead, Pb	ND	1	"	"	"	0.5	mg/kg
Antimony, Sb	**29.7**	1	"	"	"	0.5	mg/kg
Selenium, Se	ND	1	"	"	"	0.5	mg/kg
Thallium, Tl	ND	1	"	"	"	0.5	mg/kg
Vanadium, V	**222**	1	"	"	"	0.5	mg/kg
Zinc, Zn	**80.0**	1	"	"	"	0.5	mg/kg

EPA 7471A - Mercury by Cold Vapor Atomic Absorption

	Result	Dilution	Batch	Prepared	Analyzed	Practical Quantitation Limit	Units
Mercury, Hg	ND	1	H17121801	12/18/2017	12/18/2017	0.020	mg/kg

ND= Not Detected

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805-399-0060

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SANTA FE SPRINGS, CA 90670
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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Aerocraft Heat Treating	**Report date:**	12/21/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/18-20/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

BATCH: **I17121802** **Prepared:** 12/18/2017 **Analyzed:** 12/19/2017

EPA 6010B by 3050B - Title 22 CAM 17 Trace Metals by ICP-OES

	Result	Spike Level	% REC	% REC Limits	% RPD	Practical Quantitation Limit	Units
METHOD BLANK:	**I171218-BLK2**						
Analytes:							
Silver, Ag	ND					0.5	mg/kg
Arsenic, As	ND					0.5	mg/kg
Barium, Ba	ND					0.5	mg/kg
Beryllium, Be	ND					0.5	mg/kg
Cadmium, Cd	ND					0.5	mg/kg
Cobalt, Co	ND					0.5	mg/kg
Chromium, Cr	ND					0.5	mg/kg
Copper, Cu	ND					0.5	mg/kg
Molybdenum, Mo	ND					0.5	mg/kg
Nickel, Ni	ND					0.5	mg/kg
Lead, Pb	ND					0.5	mg/kg
Antimony, Sb	ND					0.5	mg/kg
Selenium, Se	ND					0.5	mg/kg
Thallium, Tl	ND					0.5	mg/kg
Vanadium, V	ND					0.5	mg/kg
Zinc, Zn	ND					0.5	mg/kg

ND= Not Detected

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Aerocraft Heat Treating	**Report date:**	12/21/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/18-20/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

BATCH: **I17121802** **Prepared:** 12/18/2017 **Analyzed:** 12/19/2017

EPA 6010B by 3050 - Title 22 CAM 17 Trace Metals by ICP-OES

	Result	Spike Level	Source Result	% REC	% RPD	% REC Limits	Units
LCS:	**I171218-LCS2**						
Analytes:							
Barium, Ba	**197**	200		99%		80 - 120	mg/kg
Cobalt, Co	**50.7**	50.0		101%		80 - 120	mg/kg
Lead, Pb	**50.9**	50.0		102%		80 - 120	mg/kg
Selenium, Se	**189**	200		95%		80 - 120	mg/kg
Zinc, Zn	**51.2**	50.0		102%		80 - 120	mg/kg
LCSD:	**I171218-LCSD2**						
Barium, Ba	**196**	200		98%	0.5%	80 - 120	mg/kg
Cobalt, Co	**50.6**	50.0		101%	0.2%	80 - 120	mg/kg
Lead, Pb	**51.0**	50.0		102%	0.2%	80 - 120	mg/kg
Selenium, Se	**190**	200		95%	0.5%	80 - 120	mg/kg
Zinc, Zn	**50.2**	50.0		100%	2.0%	80 - 120	mg/kg

ND= Not Detected

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Aerocraft Heat Treating	**Report date:**	12/21/2017
Client Address:	15701 Minnesota Ave. Paramount, CA 90723	**JEL Ref. No.:**	ST-11578
Attn:	Juan Carlos Ruiz	**Date Sampled:**	12/13/2017
		Date Received:	12/15/2017
		Date Analyzed:	12/18-20/2017
Project Address:	15701 Minnesota Avenue Paramount, CA 90280	**Physical State:**	Soil

BATCH: **H17121801** **Prepared:** 12/18/2017 **Analyzed:** 12/18/2017

EPA 7471A - Mercury by Cold Vapor Atomic Absorption

	Result	Spike Level	Source Result	% REC	% RPD	% REC Limits	Units
METHOD BLANK:	**H171218-BLK1**						
Analytes:							
Mercury, Hg	ND						mg/kg
LCS:	**H171218-LCS1**						
Mercury, Hg	**0.88**	1.00		88%		80 - 120	mg/kg
LCSD:	**H171218-LCSD1**						
Mercury, Hg	**0.87**	1.00		87%	**1.1%**	80 - 120	mg/kg

ND= Not Detected

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

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P.O. Box 5387
Fullerton, CA 92838
(714) 449-9937
Fax (714) 449-9685
www.jonesenvironmentallab.com

Chain-of-Custody Record

Client: Aerocraft Heat Treating
Date: 12/13/2017
Project Name:
Client Project #:
Project Address: 15701 Minnesota Avenue, Paramount, CA. 90280
Email: juan.c.ruiz@dicksontesting.com
Phone: 562 412 2434
Report To: Juan Carlos Ruiz
Sampler:

Report Options
Tier I - (Results/Default) ____ Tier III - (Data Validation Package) 10% Surcharge____
Tier II - (Results + QC) ____ Tier IV - (Client specified) 10% Surcharge ____
EDD ____ EDF ____

JEL Project # ST-11578

Page 1 of 1

Lab Use Only
Sample Condition as Recieved:
Chilled ☐ yes ☐ no
Sealed ☐ yes ☐ no

Turn Around Requested:
- ☐ Immediate Attention
- ☐ Rush 24-48 Hours
- ☐ Rush 72-96 Hours
- ☒ Normal
- ☐ Mobile Lab

Tracer:
- ☐ n-propanol
- ☐ n-pentane
- ☐ 1,1-DFA
- ☐ Helium
- ☐ _____

Shut In Test Y / N

Purge Number
☐ 1P ☐ 3P ☐ 7P ☐ 10P

Analysis Requested

Sample ID	Purge Number	Purge Volume	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Preservative	Date of Preservative	Container Type(s)	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Soil Gas	CAM-17	TCLP- Chromium				Magnehelic Reading (in/H_2O)	Number of Containers	Remarks & Special Instructions
Waste Inswool Ceramic Fiber			12/13/17	09:00am		ST-11578-01			GLASS	S	X						1	
Inspection Baghouse Dust			12/15/17	08:30am		ST-11578-02			Poly	S		X					1	

Relinquished By (Signature):	Date: 12/15/17.	Received By (Signature):	Date: 12/15
Company: Aerocraft Heat Treating	Time: 8:50 am	Company: JEL	Time: 0850
Relinquished By (Signature):	Date:	Received By (Signature):	Date:
Company	Time:	Company	Time:
Relinquished By (Signature):	Date:	Received By (Signature):	Date:
Company	Time:	Company	Time:

2 Total Number of Containers

The delivery of samples and the signature on this Chain of Custody form constitutes authorization to perform the analyses specificied above under the Terms and Conditions set forth

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

30 January 2018

Maddy Voloshin
Jones Environmental
11007 Forest Place
Santa Fe Springs, CA 90670

RE: Aerocraft Heat Treating - 15701 Minnesota Ave

Enclosed are the results of analyses for samples received by the laboratory on 01/23/18 15:18. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rose Fasheh
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Jones Environmental	Project: Aerocraft Heat Treating - 15701 Minnesota Ave	
11007 Forest Place	Project Number: ST-11715	**Reported:**
Santa Fe Springs CA, 90670	Project Manager: Maddy Voloshin	01/30/18 15:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Waste Inswool Ceramic Fiber	T180264-01	Fiber	01/23/18 11:30	01/23/18 15:18

SunStar Laboratories, Inc.

Rose Fasheh

Rose Fasheh, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Jones Environmental	Project: Aerocraft Heat Treating - 15701 Minnesota Ave	
11007 Forest Place	Project Number: ST-11715	**Reported:**
Santa Fe Springs CA, 90670	Project Manager: Maddy Voloshin	01/30/18 15:45

DETECTIONS SUMMARY

Sample ID: Waste Inswool Ceramic Fiber **Laboratory ID:** T180264-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Chromium	**0.33**	0.10	mg/l	EPA 1311	

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949.297.5020 Phone
949.297.5027 Fax

Jones Environmental	Project: Aerocraft Heat Treating - 15701 Minnesota Ave	
11007 Forest Place	Project Number: ST-11715	**Reported:**
Santa Fe Springs CA, 90670	Project Manager: Maddy Voloshin	01/30/18 15:45

Waste Inswool Ceramic Fiber

T180264-01 (Fiber)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCLP Metals by 6000/7000 Series Methods									
Chromium	**0.33**	0.10	mg/l	1	8012429	01/24/18	01/29/18	EPA 1311	

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Jones Environmental	Project: Aerocraft Heat Treating - 15701 Minnesota Ave	
11007 Forest Place	Project Number: ST-11715	**Reported:**
Santa Fe Springs CA, 90670	Project Manager: Maddy Voloshin	01/30/18 15:45

TCLP Metals by 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8012429 - TCLP Metals										
Blank (8012429-BLK1)				Prepared: 01/24/18 Analyzed: 01/29/18						
Chromium	ND	0.10	mg/l							
LCS (8012429-BS1)				Prepared: 01/24/18 Analyzed: 01/29/18						
Chromium	0.489	0.10	mg/l	0.500		97.9	0-200			
Matrix Spike (8012429-MS1)	**Source: T180264-01**			Prepared: 01/24/18 Analyzed: 01/29/18						
Chromium	0.831	0.10	mg/l	0.500	0.335	99.2	0-200			
Matrix Spike Dup (8012429-MSD1)	**Source: T180264-01**			Prepared: 01/24/18 Analyzed: 01/29/18						
Chromium	0.812	0.10	mg/l	0.500	0.335	95.4	0-200	2.33	200	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Jones Environmental	Project: Aerocraft Heat Treating - 15701 Minnesota Ave	
11007 Forest Place	Project Number: ST-11715	**Reported:**
Santa Fe Springs CA, 90670	Project Manager: Maddy Voloshin	01/30/18 15:45

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager

T180264

JONES ENVIRONMENTAL, INC.

11007 Forest Pl.
Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.jonesenv.com

Chain-of-Custody Record

Client	Aerocraft Heat Treating
Date	1/23/18
Project Name	Waste
Client Project #	
Project Address	15701 Minnesota Ave Paramount, CA
Email	maddy@jonesenv.com
Phone	714 449 9937
Report To	Maddy Voloshin
Sampler	JCR

Turn Around Requested:
- ☐ Immediate Attention
- ☐ Rush 24 Hours
- ☐ Rush 48 Hours
- ☐ Rush 72 Hours
- ☐ Normal

Report Options
EDD _____
EDF* - 10% Surcharge____
*Global ID _____

LAB USE ONLY

Jones Project # ST-11715

Page 1 of 1

Sample Condition as Recieved:
Chilled ☐ yes ☐ no
Sealed ☐ yes ☐ no

Sample Container / Preservative Abbreviations

AS - Acetate Sleeve
SS - Stainless Steel Sleeve
BS - Brass Sleeve
G - Glass
AB - Amber Bottle
P - Plastic
SOBI - Sodium Bisulfate
MeOH - Methanol
HCl - Hydrochloric Acid
HNO3 - Nitric Acid
O - Other (See Notes)

2.5

Analysis Requested

Sample ID	Date	Sample Collection Time	Laboratory Sample ID	Preservative	Sample Container	Sample Matrix: Soil (S), Sludge (SL), Aqueous (A), Free Product (FP)	TCLP - chromium	Number of Containers	Notes & Special Instructions
Waste inc wool ceramic Fiber	1/23	1130	ST-11715-01	-	poly		X		

Total Number of Containers

Relinquished By (Signature)	**Printed Name** Madeline Voloshin	**Received By (Signature)**	**Printed Name** Joseph Gomez
Company Jones Env	**Date** 1/23/18 **Time** 1339	**Company** Sunstar	**Date** 1/23/18 **Time** 13:39
Relinquished By (Signature)	**Printed Name** Joseph Gomez	**Received By Laboratory (Signature)**	**Printed Name** Sunny
Company Sunstar	**Date:** 1/23/18 **Time** 15:18	**Company** Sun Star	**Date** 1-23-18 **Time** 15:18

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

22 of 24

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T180264

Client Name: JONES Project: WASTE

Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other

If Courier, Received by: JOEY Date/Time Courier Received: 1.23.18 / 13:39

Lab Received by: SUNNY Date/Time Lab Received: 1.23.18 / 15:18

Total number of coolers received: 1

Temperature: Cooler #1 2.7	°C +/- the CF (- 0.2°C) = 2.5	°C corrected temperature	
Temperature: Cooler #2	°C +/- the CF (- 0.2°C) =	°C corrected temperature	
Temperature: Cooler #3	°C +/- the CF (- 0.2°C) =	°C corrected temperature	
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes**	☐ **No**
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☐ Yes	☐ No*	☒ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☒ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: SL 1.23.18

Comments:

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T180264

Client: **Jones Environmental** **Project Manager:** **Rose Fasheh**

Project: **Aerocraft Heat Treating - 15701 Minnesota Ave** **Project Number:** **ST-11715**

Report To:

Jones Environmental
Maddy Voloshin
11007 Forest Place
Santa Fe Springs, CA 90670

Date Due:	01/30/18 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	01/23/18 15:18
Logged In By:	Sunny Lounethone	Date Logged In:	01/23/18 15:39

Samples Received at: **2.5°C**

Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T180264-01 Waste Inswool Ceramic Fiber [Soil] Sampled 01/23/18 11:30 (GMT-08:00) Pacific Time (US &				
TCLP Leaching Procedure Metals	01/30/18 15:00	5	07/22/18 11:30	
TCLP Pb	01/30/18 15:00	5	07/22/18 11:30	Chromium only

Reviewed By

Date

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123188614	5/25/2021	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: John S Meek Company Inc

Generator Site Address: 14732 South Maple Ave

City: Gardena **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 120 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of Weathered Wood Waste and or Treated Wood Waste must be in accordance with California Health and Safety Code (HSC) Sections 25150.7 and 25150.8 (for TWW) or in accordance with HSC Section 25143.1.5 (for TWW-Utility).

Special Waste Analyst Signature: _____ **Name (Printed):** KEITH DIAMANTI

Date: 5/25/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Coyle

Date: 5/25/2018

REPUBLIC SERVICES

EXPRESS WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 8614

Sales Rep #: 585 - Ed Antolin

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: John S. Meek Company Inc.			
Generator Site Address: 14732 South Maple Ave.			
City: Gardena	County: Los Angeles	State: California	Zip: 90248
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS #.
Generator Mailing Address (if different): 14732 South Maple Ave.			
City: Gardena	County: Gardena	State: California	Zip: 90248
Generator Contact Name: Joshua Jilk		Email:	
Phone Number: (310) 830-6323 Ext:		Fax Number: (310) 835-2163	

II. Billing Information

Bill To: Republic Services		Contact Name: Gaby Munoz	
Billing Address: 14905 S. San Pedro St.		Email:	
City: Gardena	State: CA	Zip: 90247	Phone: (562) 254-6124

III. Waste Stream Information

Name of Waste: (Petroleum products-applies only to contaminated media and debris).			
☐ Diesel Fuel	☐ Home Heating Fuel #1-6	☐ Kerosene	☐ Aviation Fuel
☐ Hydraulic Fluid	☐ Unleaded Gasoline (UST Corrective Action)		
☑ Weathered Wood	☐ RCRA Empty Containers	☐ Treated Medical Waste	☐ Animal Carcass (non infectious)
☐ Plant Trash	☐ Meth Contaminated Debris		
☐ Friable Asbestos	☐ Non Friable Asbestos	☐ Cured Asphalt	☐ Tires
☐ Food Products (Including Animal Food)			

Process Generating Waste: Disposal of stock deteriorated shoring timbers.

Method of Shipment: ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: 120 Cubic Yards

Frequency: ☐ ONE TIME ☑ ONGOING

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services, Inc.

Joshua Jilk / Project Manager	John S. Meek Company
Authorized Representative Name/Title (Type or Print)	Company Name
Authorized Representative Signature	05/25/2018
	Date

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

Waste Profile #	Expiration Date
5123189039	10/30/2018

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Norwalk La Mirada Unified School District

Generator Site Address: 11356 Leffingwell Road

City: Norwalk **County:** **State:** CA **Zip:**

Name of Waste: SOil

Estimated Annual Volume: 5 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 6/5/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 6/5/2018

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: Sunshine Canyon Landfill --- Select a Facility ---

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Waste Profile #
5123 18 9039
Sales Rep #:

I. Generator Information

Generator Name: NORWALK LA MIRADA UNIFIED SCHOOL DISTRICT			
Generator Site Address: 11356 LEFFINGWELL ROAD			
City: NORWALK	County: LA	State: California	Zip: 90650
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☑ 12820 PIONEER BLVD			
City: NORWALK	County: LA	State: California	Zip: 90650
Generator Contact Name: MS. EDITH C. FLORENCE		Email:	
Phone Number: (562) 868-9014	Ext:	Fax Number:	

II. Billing Information

Bill To: ENVIRONMENTAL MANAGEMENT TECHNOLOGIES		Contact Name: MARIA	
Billing Address: 1456 S. GAGE STREET		Email: MARIA@EMT4ENV.COM	
City: SAN BERNARDINO	State: CA	Zip: 92408	Phone: (800) 579-6834

III. Waste Stream Information

Name of Waste: SOIL	
Process Generating Waste: EXCAVATION/REMEDIATION General Site construction. Soil Stockpiles tested too high to be re-used for backfill material (E.F. 6-5-18)	
Type of Waste:	☐ INDUSTRIAL PROCESS WASTE ☑ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	5 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification ☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☑ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date: 04/26/2018	
Sample ID Numbers: 402091-001	

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. SOIL (PLEASE SEE ATTACHED ANALYSIS)	100%
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
BROWN	NONE	☐ YES or ☑ NO	100	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Edith C Florence, Director
Authorized Representative Name And Title (Type or Print)

NLMUSD FACILITIES PLANNING & CONSTRUCTION
Company Name

Edith C Florence
Authorized Representative Signature

5/17/18
Date

Enthalpy Analytical, LLC
931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	Ninyo & Moore
Address:	475 Goddard Suite 200 Irvine, CA 92618
Attn:	Patrick Cullip

Lab Request:	402091
Report Date:	04/30/2018
Date Received:	04/26/2018
Client ID:	15461

Comments: Norwalk HS PEA
209800001
11356 Leffingwell Rd., Norwalk, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
402091-001	WC-Bin

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

Matrix:	Solid	**Client:**	Ninyo & Moore	**Collector:**	Client
Sampled:	04/26/2018	**Site:**			
Sample #:	**402091-001**	**Client Sample #:**	WC-Bin	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1190570		
Antimony	ND	1	0.37	3	mg/Kg	04/27/18	04/27/18	KLN	
Arsenic	**9.81**	1	0.36	1	mg/Kg	04/27/18	04/27/18	KLN	
Barium	**118**	1	0.23	1	mg/Kg	04/27/18	04/27/18	KLN	
Beryllium	ND	1	0.17	0.5	mg/Kg	04/27/18	04/27/18	KLN	
Cadmium	**0.61**	1	0.21	0.5	mg/Kg	04/27/18	04/27/18	KLN	
Chromium	**20.4**	1	0.13	1	mg/Kg	04/27/18	04/27/18	KLN	
Cobalt	**10.3**	1	0.19	0.5	mg/Kg	04/27/18	04/27/18	KLN	
Copper	**23.6**	1	0.31	1	mg/Kg	04/27/18	04/27/18	KLN	
Lead	**25.6**	1	0.32	1	mg/Kg	04/27/18	04/27/18	KLN	
Molybdenum	**0.61 J**	1	0.13	1	mg/Kg	04/27/18	04/27/18	KLN	B1,J
Nickel	**16.0**	1	0.2	1.5	mg/Kg	04/27/18	04/27/18	KLN	
Selenium	ND	1	0.72	3	mg/Kg	04/27/18	04/27/18	KLN	
Silver	**0.40 J**	1	0.13	0.5	mg/Kg	04/27/18	04/27/18	KLN	J
Thallium	ND	1	0.42	3	mg/Kg	04/27/18	04/27/18	KLN	
Vanadium	**34.8**	1	0.37	0.5	mg/Kg	04/27/18	04/27/18	KLN	
Zinc	**234**	1	0.28	5	mg/Kg	04/27/18	04/27/18	KLN	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID: QC1190576		
Mercury	**0.16**	1	0.02	0.14	mg/Kg	04/27/18	04/27/18	JP	
Method: EPA 8015M Prep Method: EPA 3580A							QCBatchID: QC1190566		
TPH (C13 to C22)	ND	1	10	10	mg/Kg	04/26/18	04/26/18	SS	
TPH (C23 to C40)	**11**	1	10	10	mg/Kg	04/26/18	04/26/18	SS	
TPH (C6 to C12)	ND	1	10	10	mg/Kg	04/26/18	04/26/18	SS	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*110*	*50-150*	

Method: EPA 8260B *NELAC* Prep Method: EPA 5030							QCBatchID: QC1190547	
1,1,1,2-Tetrachloroethane	ND	1.04	0.2496	5.2	ug/Kg		04/26/18	LZ
1,1,1-Trichloroethane	ND	1.04	0.156	5.2	ug/Kg		04/26/18	LZ
1,1,2,2-Tetrachloroethane	ND	1.04	0.3016	5.2	ug/Kg		04/26/18	LZ
1,1,2-Trichloroethane	ND	1.04	0.2288	5.2	ug/Kg		04/26/18	LZ
1,1,2-Trichlorotrifluoroethane	ND	1.04	0.7696	5.2	ug/Kg		04/26/18	LZ
1,1-Dichloroethane	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ
1,1-Dichloroethene	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ
1,1-Dichloropropene	ND	1.04	0.2184	5.2	ug/Kg		04/26/18	LZ
1,2,3-Trichlorobenzene	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ
1,2,3-Trichloropropane	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ
1,2,4-Trichlorobenzene	ND	1.04	0.3432	5.2	ug/Kg		04/26/18	LZ
1,2,4-Trimethylbenzene	ND	1.04	0.2912	5.2	ug/Kg		04/26/18	LZ
1,2-Dibromo-3-chloropropane	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ
1,2-Dibromoethane	ND	1.04	0.1248	5.2	ug/Kg		04/26/18	LZ
1,2-Dichlorobenzene	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ
1,2-Dichloroethane	ND	1.04	0.1456	5.2	ug/Kg		04/26/18	LZ
1,2-Dichloropropane	ND	1.04	0.3536	5.2	ug/Kg		04/26/18	LZ
1,3,5-Trimethylbenzene	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ
1,3-Dichlorobenzene	ND	1.04	0.2184	5.2	ug/Kg		04/26/18	LZ
1,3-Dichloropropane	ND	1.04	0.1976	5.2	ug/Kg		04/26/18	LZ
1,4-Dichlorobenzene	ND	1.04	0.2496	5.2	ug/Kg		04/26/18	LZ
2,2-Dichloropropane	ND	1.04	0.1976	5.2	ug/Kg		04/26/18	LZ
2-Butanone (MEK)	ND	1.04	0.7488	104	ug/Kg		04/26/18	LZ
2-Chlorotoluene	ND	1.04	0.26	5.2	ug/Kg		04/26/18	LZ
4-Chlorotoluene	ND	1.04	0.2288	5.2	ug/Kg		04/26/18	LZ
4-Isopropyltoluene	ND	1.04	0.2808	5.2	ug/Kg		04/26/18	LZ

Matrix:	Solid	**Client:**	Ninyo & Moore	**Collector:**	Client
Sampled:	04/26/2018	**Site:**			
Sample #:	**402091-001**	**Client Sample #:**	WC-Bin	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
4-Methyl-2-pentanone (MIBK)	ND	1.04	0.1768	5.2	ug/Kg		04/26/18	LZ	
Acetone	**63 J**	1.04	52	104	ug/Kg		04/26/18	LZ	J
Allyl Chloride	ND	1.04	0.1456	5.2	ug/Kg		04/26/18	LZ	
Benzene	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ	
Bromobenzene	ND	1.04	0.312	5.2	ug/Kg		04/26/18	LZ	
Bromochloromethane	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ	
Bromodichloromethane	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ	
Bromoform	ND	1.04	0.1976	5.2	ug/Kg		04/26/18	LZ	
Bromomethane	ND	1.04	0.2288	5.2	ug/Kg		04/26/18	LZ	
Carbon Tetrachloride	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ	
Chlorobenzene	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ	
Chlorodibromomethane	ND	1.04	0.1976	5.2	ug/Kg		04/26/18	LZ	
Chloroethane	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ	
Chloroform	ND	1.04	0.1768	5.2	ug/Kg		04/26/18	LZ	
Chloromethane	ND	1.04	0.2184	5.2	ug/Kg		04/26/18	LZ	
cis-1,2-Dichloroethene	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ	
cis-1,3-dichloropropene	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ	
cis-1,4-dichloro-2-butene	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ	
Dibromomethane	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ	
Dichlorodifluoromethane	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ	
Di-isopropyl ether (DIPE)	ND	1.04	0.2184	5.2	ug/Kg		04/26/18	LZ	
Ethylbenzene	ND	1.04	0.26	5.2	ug/Kg		04/26/18	LZ	
Ethyl-tertbutylether (ETBE)	ND	1.04	0.4368	5.2	ug/Kg		04/26/18	LZ	
Hexachlorobutadiene	ND	1.04	0.3952	5.2	ug/Kg		04/26/18	LZ	
Isopropylbenzene	ND	1.04	0.1768	5.2	ug/Kg		04/26/18	LZ	
m and p-Xylene	**0.56 J**	1.04	0.2184	5.2	ug/Kg		04/26/18	LZ	J
Methylene chloride	ND	1.04	0.2288	5.2	ug/Kg		04/26/18	LZ	
Methyl-t-butyl Ether (MTBE)	ND	1.04	0.26	5.2	ug/Kg		04/26/18	LZ	
Naphthalene	ND	1.04	0.2912	5.2	ug/Kg		04/26/18	LZ	
N-butylbenzene	ND	1.04	0.1664	5.2	ug/Kg		04/26/18	LZ	
N-propylbenzene	ND	1.04	0.1976	5.2	ug/Kg		04/26/18	LZ	
o-Xylene	**0.23 J**	1.04	0.1352	5.2	ug/Kg		04/26/18	LZ	J
Sec-butylbenzene	ND	1.04	0.3536	5.2	ug/Kg		04/26/18	LZ	
Styrene	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ	
t-Butyl alcohol (TBA)	ND	1.04	9.152	10.4	ug/Kg		04/26/18	LZ	
Tert-amylmethylether (TAME)	ND	1.04	0.1976	5.2	ug/Kg		04/26/18	LZ	
Tert-butylbenzene	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ	
Tetrachloroethene	ND	1.04	0.208	5.2	ug/Kg		04/26/18	LZ	
Toluene	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ	
trans-1,2-dichloroethene	ND	1.04	0.2392	5.2	ug/Kg		04/26/18	LZ	
trans-1,3-dichloropropene	ND	1.04	0.1456	5.2	ug/Kg		04/26/18	LZ	
trans-1,4-dichloro-2-butene	ND	1.04	0.3952	5.2	ug/Kg		04/26/18	LZ	
Trichloroethene	ND	1.04	0.4056	5.2	ug/Kg		04/26/18	LZ	
Trichlorofluoromethane	ND	1.04	0.26	5.2	ug/Kg		04/26/18	LZ	
Vinyl Chloride	ND	1.04	0.1872	5.2	ug/Kg		04/26/18	LZ	
Xylenes (Total)	**0.79 J**	1.04	0.468	5.2	ug/Kg		04/26/18	LZ	J

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*106*	*70-145*	
4-Bromofluorobenzene (SUR)	*106*	*70-145*	
Dibromofluoromethane (SUR)	*99*	*70-145*	
Toluene-d8 (SUR)	*97*	*70-145*	

QCBatchID: QC1190547	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 04/26/2018	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1190547MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	50	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	
Isopropylbenzene	ND	ug/Kg	0.17	5	

QCBatchID: QC1190547 **Analyst:** lucy **Method:** EPA 8260B

Matrix: Solid **Analyzed:** 04/26/2018 **Instrument:** VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1190547MB1					
m and p-Xylene	ND	ug/Kg	0.21	5	
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1190547LCS1											
1,1-Dichloroethene	50		46		ug/Kg	92			59-172		
Benzene	50		47		ug/Kg	94			62-137		
Chlorobenzene	50		47		ug/Kg	94			60-133		
Methyl-t-butyl Ether (MTBE)	50		49		ug/Kg	98			62-137		
Toluene	50		44		ug/Kg	88			59-139		
Trichloroethene	50		50		ug/Kg	100			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1190547MS1, QC1190547MSD1												**Source: 402090-001**
1,1-Dichloroethene	ND	50	50	44	44	ug/Kg	88	88	0.0	59-172	22	
Benzene	ND	50	50	40	40	ug/Kg	80	80	0.0	62-137	24	
Chlorobenzene	ND	50	50	39	39	ug/Kg	78	78	0.0	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	38	42	ug/Kg	76	84	10.0	62-137	21	
Toluene	ND	50	50	38	37	ug/Kg	76	74	2.7	59-139	21	
Trichloroethene	ND	50	50	44	44	ug/Kg	88	88	0.0	66-142	21	

QCBatchID: QC1190566	Analyst: bbuilt	Method: EPA 8015M
Matrix: Solid	Analyzed: 04/26/2018	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1190566MB1					
TPH (C13 to C22)	ND	mg/Kg	10	10	
TPH (C23 to C40)	ND	mg/Kg	10	10	
TPH (C23 to C44)	ND	mg/Kg	10	10	
TPH (C6 to C12)	ND	mg/Kg	10	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1190566LCS1											
TPH (C13 to C22)	250		200		mg/Kg	80			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1190566MS1, QC1190566MSD1												**Source: 402090-001**
TPH (C13 to C22)	ND	250	250	200	210	mg/Kg	80	84	4.9	70-130	20	

QCBatchID: QC1190570 **Analyst:** dswafford **Method:** EPA 6010B

Matrix: Solid **Analyzed:** 04/27/2018 **Instrument:** AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1190570MB1					
Antimony	**1.15 J**	mg/Kg	0.37	3	
Arsenic	**0.73 J**	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	1	
Molybdenum	**0.19 J**	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	**1.20 J**	mg/Kg	0.72	3	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	3	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1190570LCS1											
Antimony	100		103		mg/Kg	103			80-120		
Arsenic	100		99.9		mg/Kg	100			80-120		
Barium	100		96.2		mg/Kg	96			80-120		
Beryllium	100		96.2		mg/Kg	96			80-120		
Cadmium	100		96.6		mg/Kg	97			80-120		
Chromium	100		94.5		mg/Kg	95			80-120		
Cobalt	100		98.9		mg/Kg	99			80-120		
Copper	100		96.0		mg/Kg	96			80-120		
Lead	100		99.3		mg/Kg	99			80-120		
Molybdenum	100		100		mg/Kg	100			80-120		
Nickel	100		98.4		mg/Kg	98			80-120		
Selenium	100		92.4		mg/Kg	92			80-120		
Silver	100		102		mg/Kg	102			80-120		
Thallium	100		99.2		mg/Kg	99			80-120		
Vanadium	100		98.2		mg/Kg	98			80-120		
Zinc	100		96.9		mg/Kg	97			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1190570MS1, QC1190570MSD1												**Source: 402088-036**
Antimony	ND	100	100	33.0	31.6	mg/Kg	33	32	4.3	75-125	20	M
Arsenic	9.81	100	100	117	117	mg/Kg	107	107	0.0	75-125	20	
Barium	119	100	100	222	220	mg/Kg	103	101	0.9	75-125	20	
Beryllium	ND	100	100	102	101	mg/Kg	102	101	1.0	75-125	20	
Cadmium	0.55	100	100	101	101	mg/Kg	100	100	0.0	75-125	20	
Chromium	19.6	100	100	121	120	mg/Kg	101	100	0.8	75-125	20	
Cobalt	10.2	100	100	111	111	mg/Kg	101	101	0.0	75-125	20	
Copper	23.4	100	100	124	124	mg/Kg	101	101	0.0	75-125	20	
Lead	25.8	100	100	123	123	mg/Kg	97	97	0.0	75-125	20	

QCBatchID: QC1190570	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 04/27/2018	**Instrument:** AAICP (group)			

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1190570MS1, QC1190570MSD1												**Source: 402088-036**
Molybdenum	ND	100	100	102	102	mg/Kg	102	102	0.0	75-125	20	
Nickel	15.5	100	100	116	116	mg/Kg	101	101	0.0	75-125	20	
Selenium	ND	100	100	31.3	30.3	mg/Kg	31	30	3.2	75-125	20	M
Silver	0.17	100	100	107	107	mg/Kg	107	107	0.0	75-125	20	
Thallium	ND	100	100	90.9	91.8	mg/Kg	91	92	1.0	75-125	20	
Vanadium	36.6	100	100	142	141	mg/Kg	105	104	0.7	75-125	20	
Zinc	241	100	100	324	343	mg/Kg	83	102	5.7	75-125	20	

QCBatchID:	**QC1190576**	**Analyst:**	dswafford	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	04/27/2018	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1190576MB1					
Mercury	ND	mg/Kg	0.02	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1190576LCS1											
Mercury	0.83		0.80		mg/Kg	96			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1190576MS1, QC1190576MSD1												**Source: 402014-001**
Mercury	0.04	0.83	0.83	0.56	0.59	mg/Kg	63	66	5.2	75-125	20	M

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
931 W. Barkley Ave, Orange, CA 92868 Phone: (714) 771-6900 Fax: (714)771-9933	Lab No: 402091 Page: 1 of 1	Standard: ; 4 Day: ; 3 Day: ; 2 Day: X ; 1 Day: ; Same Day:
Billing: Enthalpy - Orange c/o Montrose Environmental Group P.O. Box 741137, Los Angeles, CA 90074-1137	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo & Moore	Name:	Norwalk HS PEA
Report To:	Patrick Cullip	Number:	209800001
Email:	pcullip@ninyoandmoore.com	P.O. #:	
Address:	475 Goddard	Address:	11356 Lethinguell Rd
	Irvine, CA		Norwalk, CA
Phone:	949) 753-7070	Global ID:	
Fax:	949) 753-7071	Sampled By:	KMH & DWF

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Title 22 Metals (6010B/7471A)	TPH (8015M)	VOCs (8260B)	Test Instructions / Comments
1	WC-Bin	4/26/18	—	SOIL	8oz jar	ICE	X	X	X	
2										
3										
4										
5										
6										
7										
8										
9										
10										

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Kristina Hill	N&M / Geologist	4/26/18 1520
[1] Received By:		C Hernandez	E.A	4/26/18 15:20
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Ninyo & Moore Project: Norwalk HS PEA

Date Received: 4/26/18 Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 2 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 4.3 #2: 5.4 #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 1.6 #2: 2.2 #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 4/26/18

Enthalpy Analytical, a subsidiary of Montrose Environmental Group ,Inc.
931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209
www.enthalpy.com/socal

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

FAX

INCOMPLETE FILE TRANSMITTAL

TO: Jonna Murray	**LOG NO.:** 5123189039
FAX: 209-466-1067	**File Received:** 6/4/2018
From: Special Waste Dept.	**Response Date:** 6/4/2018
Re: Norwalk La Mirada Unified School District / SOil	

SECTION I	SECTION II	SECTION III	SECTION IV	SECTION V	SECTION VI
☐ DisposalFacility	☐ TransporterName	☐ NameOfWaste	☐ USEPA	☐ CharacteristicComponents	☐ GenAuthSignature
☐ GeneratorName	☐ TransporterSiteAddress	☑ ProcessGeneratingWaste	☐ SampleDate	☐ FreeLiquids	☐ GenCoName
☐ GeneratorSiteAddress	☐ TransporterCityStateZip	☐ TypeOfWaste	☐ CompositeGrab	☐ YesNo	☐ NoStateLetter
☐ GeneratorCityStateZip	☐ TransporterMailingAddress	☐ PhysicalState	☐ SampleID	☐ pH_Flash	☐ Name_Title
☐ GeneratorMailingAddress	☐ TransporterContactName	☐ MethodOfShipment			☐ SignatureDate
☐ GeneratorContactName	☐ TransporterTelFax	☐ EstimatedAnnualVolume			
☐ GeneratorTelFax		☐ Frequency			
☐ GeneratorStateID		☐ DisposalConsideration			
☐ WasteCodeTexas					

ANALYTICALS	TCLP TOTAL METALS	TCLP VOLATILES	TCLP SEMI-VOLATILES	PESTICIDES / HERBICIDE	
☐ TotalCyanide	☐ Arsenic	☐ Benzene	☐ Cresols	☐ Chlordane	☐ LabLetterhead
☐ ReactiveCyanide	☐ Barium	☐ CarbonTetrachloride	☐ DichlorobenzeneOne	☐ Endrin	☐ ChainOfCustody
☐ TotalSulfide	☐ Cadmium	☐ Chlorobenzene	☐ DinitrotolueneTwo	☐ Heptachlor	☐ NoLabSignature
☐ ReactiveSulfide	☐ Chromium	☐ Chloroform	☐ Hexachlorobenzene	☐ HeptachlorEpoxide	☐ ReportOneYearOldPlus
☐ TotalPCB	☐ Copper	☐ DichloroethaneOne	☐ Nitrobenzene	☐ Lindane	☐ NoThirdPartyLab
☐ TOX_EOX	☐ Lead	☐ DichloroehyleneTwo	☐ Pentachlorophenol	☐ Methoxychlor	☐ MissingReportPages
☐ Phenols	☐ Mercury	☐ MethylEthylKetone	☐ Pyridine	☐ Toxaphene	☐ MissingMSDSPages
☐ FlashPoint	☐ Selenium	☐ Tetrachloroethylene	☐ TrichlorophenolFive	☐ TwoFourD	☐ TotalSulfates
☐ pH	☐ Silver	☐ Trichlorethylene	☐ TrichlorphenolSix	☐ TwoFourFiveTP	☐ TotalSulfur
☐ PaintFilter	☐ Zinc	☐ VinylChloride			☐ WrongProfile
☐ TPH					
☐ BTEX					☑ GeneratorIncomplete

Notes:

Please have the generator provide more detail in the process generating waste: why is the soil being excavated? What is being remediated? Was there a spill or release? Please have the generator explain.

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: Sunshine Canyon Landfill --- Select a Facility ---

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Waste Profile #
5123 18 9039
Sales Rep #:

I. Generator Information

Generator Name: NORWALK LA MIRADA UNIFIED SCHOOL DISTRICT			
Generator Site Address: 11356 LEFFINGWELL ROAD			
City: NORWALK	County: LA	State: California	Zip: 90650
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☑ 12820 PIONEER BLVD			
City: NORWALK	County: LA	State: California	Zip: 90650
Generator Contact Name: MS. EDITH C. FLORENCE		Email:	
Phone Number: (562) 868-9014	Ext:	Fax Number:	

II. Billing Information

Bill To: ENVIRONMENTAL MANAGEMENT TECHNOLOGIES		Contact Name: MARIA	
Billing Address: 1456 S. GAGE STREET		Email: MARIA@EMT4ENV.COM	
City: SAN BERNARDINO	State: CA	Zip: 92408	Phone: (800) 579-6834

III. Waste Stream Information

Name of Waste: SOIL	
Process Generating Waste: EXCAVATION/REMEDIATION	
Type of Waste:	☐ INDUSTRIAL PROCESS WASTE ☑ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	5 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification ☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☑ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date: 04/26/2018	
Sample ID Numbers: 402091-001	

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. SOIL (PLEASE SEE ATTACHED ANALYSIS)	100%
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
BROWN	NONE	☐ YES or ☑ NO	100	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Edith C Florence, Director
Authorized Representative Name And Title (Type or Print)

NLMUSD FACILITIES PLANNING & CONSTRUCTION
Company Name

Edith C Florence
Authorized Representative Signature

5/17/18
Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	51231617062	5/31/2018	

I. Decision Request: ☐ Initial ☑ Recertification ☑ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: United States Coast Guard

Generator Site Address: 1001 South Seaside Ave

City: San Pedro **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 150 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Per the Special Waste Profile Change Form dated January 16, 2018, the generator has requested a time extension until MAY 31, 2018 in order to complete disposal of the profiled waste.

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 1/18/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Cagle

Date: 1/18/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Disposal Facility:	5123 Sunshine Canyon LF CA	Waste Profile #	~~5124 16 17062~~ 5123 16 17062

I. Generator Information

Generator Name: UNITED STATES COAST GUARD			
Generator Site Address: 1001 SOUTH SEASIDE AVENUE			
City: SAN PEDRO	County: L.A.	State: California	Zip: 90731
State ID/Reg No: CA9690308730	State Approval/Waste Code:		NAICS #:
Generator Mailing Address (if different): ☐ 1001 SOUTH SEASIDE AVENUE			
City: SAN PEDRO	County: L.A.	State: California	Zip: 90731
Generator Contact Name: PAUL L. NELSON		Email: Paul.L.Nelson@USCG.MIL	
Phone Number: (310) 521-6020		Fax Number:	

II. Waste Stream Information

Name of Waste: WEATHERED WOOD

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

Paul Nelson Asst. facility Eng.	US Coast Guard
Authorized Representative Name And Title (Printed)	Company Name
Authorized Representative Signature	1-16-18 Date

REPUBLIC SERVICES

SPECIAL WASTE PROFILE – CHANGE

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

This form may be used to request changes to an existing Special Waste Profile.			
Generator Name:	UNITED STATES COAST GUARD		
Name of Waste:	WEATHERED WOOD	Waste Profile #	51231617062

II. Purpose of Change

Description of Change Requested and Reason for Change: (Provide detailed explanation of why the change is requested following the appropriate checked box below).

- ☐ Volume Increase By:
  Is the analysis originally submitted with the Profile representative of the volume Increase? ☑ Yes ☐ No If No, complete Section III, below.
- ☒ Extend Expiration Date: Delayed of project completion due to temporary ocean restrictions applied to the waters where working 5/31/18
- ☐ Change or Add Landfill:
- ☐ Add Additional Laboratory Reports: **Complete Representative Sample Certification, Section III, below.**
- ☐ Add MSDS:
- ☐ Generator Name Change:
- ☐ Other:

III. Representative Sample Certification

☑ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date: Same than previous application

Sample ID Numbers:

IV. Certification

I hereby certify that the waste and the process generating the waste are unchanged and are accurately represented in the original profile.

Paul Nelson Asst Facility Eng.	US Coast Guard
Authorized Representative Name and Title (Printed)	Company Name
Authorized Representative Signature	1-16-18 Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile # 51231621434	**Expiration Date** 12/13/2020	
I. Decision Request:	☐ **Initial** ☑ **Recertification** ☑ **Change**		

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Jushi USA Fiberglass Co LTD

Generator Site Address: 4982 4th St

City: Irwindale	**County:**	**State:** CA	**Zip:**

Name of Waste: Fiberglass

Estimated Annual Volume: 40 Tons

II. Special Waste Department Decision: ☑ **Approved** ☐ **Rejected**

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Per the Special Waste Change form dated 6-29-2018, the profile frequency was changed from one time to ongoing.

Special Waste Analyst Signature: _____ **Name (Printed):** Suzanne Glass

Date: 6/29/2018

III. Facility Decision: ☐ **Approved** ☐ **Rejected**

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Coyle

Date: 6/29/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Waste Profile #
5123-16-21434 ~~5127162 1434~~ HL

Disposal Facility: 5123 Sunshine Canyon LF CA

I. Generator Information

Generator Name: JUSHI USA Fiberglass Co., Ltd.			
Generator Site Address: 4982 4th St.			
City: Irwindale	County: Los Angeles	State: California	Zip: 91706
State ID/Reg No:	State Approval/Waste Code:		NAICS #:
Generator Mailing Address (if different): ☐ 4982 4th St.			
City: Irwindale	County:	State: California	Zip: 91706
Generator Contact Name: Hanchen Liu		Email: louis.liu@jushiusa.com	
Phone Number: (906) 370-9955		Fax Number:	

II. Waste Stream Information

Name of Waste: Fiberglass

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

HANCHEN LIU - Director of Business Growth Initiatives — Authorized Representative Name And Title (Printed)

Hanchen Liu — Authorized Representative Signature

Jushi USA Fiberglass Co., Ltd. — Company Name

06/29/2018 — Date

REPUBLIC SERVICES

SPECIAL WASTE PROFILE – CHANGE

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

This form may be used to request changes to an existing Special Waste Profile.			
Generator Name:	Jushi USA Fiberglass Co., Ltd.		5123-16-21434
Name of Waste:	Fiberglass	Waste Profile #	~~5127162143~~ 4

II. Purpose of Change

HL

Description of Change Requested and Reason for Change: (Provide detailed explanation of why the change is requested following the appropriate checked box below).

- ☐ Volume Increase By:
  Is the analysis originally submitted with the Profile representative of the volume Increase? ☐ Yes ☐ No If No, complete Section III, below.
- ☐ Extend Expiration Date:
- ☐ Change or Add Landfill:
- ☐ Add Additional Laboratory Reports: **Complete Representative Sample Certification, Section III, below.**
- ☐ Add MSDS:
- ☐ Generator Name Change:
- ☒ Other:
  Complete and update the old profile, and it is an ongoing profile.
  Hanchen Liu

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

IV. Certification

I hereby certify that the waste and the process generating the waste are unchanged and are accurately represented in the original profile.

HANCHEN LIU - Director of Business Growth Initiatives	Jushi USA Fiberglass Co., Ltd.
Authorized Representative Name and Title (Printed)	Company Name
Hanchen Liu	06/29/2018
Authorized Representative Signature	Date

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile # 51231621434	**Expiration Date** 12/13/2017	
I. Decision Request:	☑ **Initial** ☐ **Recertification** ☐ **Change**		

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Jushi USA Fiberglass Co LTD

Generator Site Address: 4982 4th St

City: Irwindale	**County:**	**State:** CA	**Zip:**

Name of Waste: Fiberglass

Estimated Annual Volume: 40 Tons

II. Special Waste Department Decision: ☑ **Approved** ☐ **Rejected**

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: _____ **Name (Printed):** Suzanne Glass

Date: 12/13/2016

III. Facility Decision: ☐ **Approved** ☐ **Rejected**

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** _____

Date: 12/13/2016

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #
5123 16 21434
Sales Rep #: 585 - Ed Antolin

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: JUSHI USA FIBERGLASS CO., LTD.			
Generator Site Address: 4982 4TH ST.			
City: IRWINDALE	County: LOS ANGELES	State: California	Zip: 91706
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☐ 4982 4TH ST.			
City: IRWINDALE	County:	State: California	Zip: 91706
Generator Contact Name: Hanhcen Liu		Email: louis.liu@jushiusa.com	
Phone Number: (626) 960-2038	Ext:	Fax Number: (626) 960-2037	

II. Billing Information

Bill To: JUSHI USA FIBERGLASS CO., LTD		Contact Name: Sharon Zhong	
Billing Address: 4982 TH ST.		Email: Sharon.zhong@jushiusa.com	
City: IRWINDALE	State: CA	Zip: 91706	Phone: (626) 960-2038

III. Waste Stream Information

Name of Waste: FIBERGLASS	
Process Generating Waste: Non-moving B grade products	
Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☐ BULK ☐ DRUM ☐ BAGGED ☑ OTHER: PALLET
Estimated Annual Volume:	40 Tons
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification

☑ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Waste Profile #
51231621434

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Direct Roving	100%
2. Roving goods	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
White	NA	☐ YES or ☑ NO	100	NA	NA °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

HANCHEN LIU	JUSHI USA FIBERGLASS CO., LTD.
Authorized Representative Name And Title (Type or Print)	Company Name
Hanchen Liu	11/18/2016
Authorized Representative Signature	Date

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

Waste Profile #	Expiration Date
51231714631	4/30/2018

I. Decision Request: ☐ Initial ☑ Recertification ☑ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: Port of Long Beach

Generator Site Address: Port of Long Beach Berth D48

City: Long Beach **County:** **State:** CA **Zip:**

Name of Waste: Weathered Wood

Estimated Annual Volume: 15 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of Weathered Wood must be in accordance with California Health and Safety Code (HSC) Sections 25150.7 and 25150.8.

Per the Special Waste Profile Change Form dated February 20, 2018, the generator has requested a time extension until APRIL 30, 2018 in order to complete disposal of the profiled waste.

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 2/21/2018

III. Facility Decision: ☒ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 2/21/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Disposal Facility:	5123 Sunshine Canyon LF CA	Waste Profile #	5123 17 14631

I. Generator Information

Generator Name: Port Of Long Beach			
Generator Site Address: Port of Long Beach Berth D-48			
City: Long Beach	County: Los Angeles	State: California	Zip: 90813
State ID/Reg No: N/a	State Approval/Waste Code:		NAICS #:
Generator Mailing Address (if different): ☐ Port of Long Beach Berth D-48			
City: Long Beach	County:	State: California	Zip: 90813
Generator Contact Name: Stuart Berge		Email: TBD	
Phone Number: (562) 283-7100		Fax Number:	

II. Waste Stream Information

Name of Waste: Weathered Wood

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date:	
Sample ID Numbers:	

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

STUART BERGE BEHALF POLB
Authorized Representative Name And Title (Printed)

Authorized Representative Signature

Port of Long Beach
Company Name

2/20/18
Date

REPUBLIC SERVICES

SPECIAL WASTE PROFILE – CHANGE

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

This form may be used to request changes to an existing Special Waste Profile.			
Generator Name:	Port Of Long Beach		
Name of Waste:	Weathered Wood	Waste Profile #	5123 17 14631

II. Purpose of Change

Description of Change Requested and Reason for Change: (Provide detailed explanation of why the change is requested following the appropriate checked box below).

- ☐ Volume Increase By:
  Is the analysis originally submitted with the Profile representative of the volume Increase? ☑ Yes ☐ No If No, complete Section III, below.
- ☒ Extend Expiration Date: 04-30-18
- ☐ Change or Add Landfill:
- ☐ Add Additional Laboratory Reports: **Complete Representative Sample Certification, Section III, below.**
- ☐ Add MSDS:
- ☐ Generator Name Change:
- ☒ Other: Project was extended beyond original approved expiration of profile. Material was not brought in before expiration of approval. Need more Time.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that the waste and the process generating the waste are unchanged and are accurately represented in the original profile.

STUART BERGE BEHALF POCB	Port Of Long Beach
Authorized Representative Name and Title (Printed)	Company Name
Authorized Representative Signature	2/20/18
	Date

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	51231716986	6/30/2018	

I. Decision Request: ☐ Initial ☑ Recertification ☑ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: City of Long Beach

Generator Site Address: Leeway Sailing Pier 5437 E Ovcan Blvd

City:	County:	State:	Zip:
Long Beach		CA	

Name of Waste: Weathered Wood

Estimated Annual Volume: 50 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Disposal of Weathered Wood must be in accordance with California Health and Safety Code (HSC) Sections 25150.7 and 25150.8 (for TWW) or in accordance with HSC Section 25143.5 (for TWW-Utility).

Per the Special Waste Profile Change Form dated April 5, 2018, the generator has requested a time extension to complete disposal of the profiled waste.

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 4/6/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 4/6/2018

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Disposal Facility:	5123 Sunshine Canyon LF CA	Waste Profile #	5123 17 16986

I. Generator Information

Generator Name: City of Long Beach			
Generator Site Address: Leeway Sailing Pier 54337 E. Ocean Blvd. Long Beach, CA 90802			
City: Long Beach	County: Los Angeles	State: California	Zip: 90802
State ID/Reg No: 95-600733	State Approval/Waste Code:		NAICS #: 614
Generator Mailing Address (if different): ☐ Leeway Sailing Pier 54337 E. Ocean Blvd. Long Beach, CA 90802			
City: Long Beach	County:	State: California	Zip: 90802
Generator Contact Name: Robert Fiege		Email: Robert.Fiege@longbeach.gov	
Phone Number: (562) 342-8814		Fax Number:	

II. Waste Stream Information

Name of Waste: Weathered Wood

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

Robert Fiege, Construction Inspector/Public Works	City Of Long Beach
Authorized Representative Name And Title (Printed)	Company Name
R Fiege	4/5/18
Authorized Representative Signature	Date

REPUBLIC SERVICES

SPECIAL WASTE PROFILE – CHANGE

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

This form may be used to request changes to an existing Special Waste Profile.			
Generator Name:	City of Long Beach		
Name of Waste:	Weathered Wood	Waste Profile #	5123 17 16986

II. Purpose of Change

Description of Change Requested and Reason for Change: (Provide detailed explanation of why the change is requested following the appropriate checked box below).

- ☐ Volume Increase By:
  Is the analysis originally submitted with the Profile representative of the volume Increase? ☑ Yes ☐ No If No, complete Section III, below.
- ■ Extend Expiration Date: 06-31-18
- ☐ Change or Add Landfill:
- ☐ Add Additional Laboratory Reports: **Complete Representative Sample Certification, Section III, below.**
- ☐ Add MSDS:
- ☐ Generator Name Change:
- ■ Other:
  Project extended

III. Representative Sample Certification

■ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that the waste and the process generating the waste are unchanged and are accurately represented in the original profile.

Robert Fiege, Construction Inspector, Public Works	City of Long Beach
Authorized Representative Name and Title (Printed)	Company Name
R Fiege	4/5/18
Authorized Representative Signature	Date

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

Waste Profile #	Expiration Date
51231810622	8/23/2018

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: SOUTHERN CALIFORNIA EDISON - IRWINDALE CORPORATE WAREHOUSE

Generator Site Address: 13025 E LOS ANGELES ST

City: IRWINDALE **County:** **State:** CA **Zip:**

Name of Waste: NON HAZ SOIL

Estimated Annual Volume: 800 Cubic Yards

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: Joseph M. Sorokach **Name (Printed):** Joseph Sorokach

Date: 6/28/2018

III. Facility Decision: ☐ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: **Name (Printed):** Chris Coyle

Date: 6/28/2018

REPUBLIC SERVICES

SPECIAL WASTE PROFILE

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #: 5123 18 10622

Sales Rep #: 585

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: Southern California Edison - Irwindale Corporate Warehouse			
Generator Site Address: 13025 E. Los Angeles St.			
City: Irwindale	County: Los Angeles	State: California	Zip: 91706
State ID/Reg No: NA	State Approval/Waste Code: NA (if applicable)		NAICS # : NA
Generator Mailing Address (if different): ☑ 2244 Walnut Grove Ave			
City: Rosemead	County: Los Angeles	State: California	Zip: 91770
Generator Contact Name: Ryan Castillo		Email: ryan.castillo@sce.com	
Phone Number: (626) 656-0453	Ext:	Fax Number:	

II. Billing Information

Bill To: MIssion Paving and Sealing		Contact Name: Phil Dresden	
Billing Address: 12747 Schabarum Ave		Email: phil@missionpaving.com	
City: Irwindale	State: CA	Zip: 91706	Phone: (626) 452-8200

III. Waste Stream Information

Name of Waste: Non-hazardous Soil

Process Generating Waste:

Excavation of soil in order to repave an Edison facility

Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	800 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification

☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☑ GRAB SAMPLE

Sample Date: 8/21/17

Sample ID Numbers: HA1 through HA4, HA6, collected 8/21/17. VOC samples collected 6/25/18.
Note that HA5 and HA7 will not be sent with this waste, it is being managed separately.

Please ignore all asphalt (AC) samples, no asphalt will be sent for disposal.

Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Soil	100
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
Brown	None	☐ YES or ☑ NO	100	NA	NA °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Ryan Castillo - Program Manager	Southern California Edison
Authorized Representative Name And Title (Type or Print)	Company Name
	6/27/18
Authorized Representative Signature	Date

Kidd, Kelly - Stockton

From: Ryan Castillo <Ryan.Castillo@sce.com>
Sent: Wednesday, June 27, 2018 2:52 PM
To: Kidd, Kelly - Stockton; Antolin, Edward; Loveland, Stacy
Cc: Riley, Mike
Subject: RE: (External):RE: (External):Soil - Sunshine Canyon

Thanks Ed and Kelly.

To answer for the lack of HA1 VOC results, the area sampled last year was covered with equipment this week and we could not get it moved in time for the sampling. If we had hits in the HA5 area (highest TPH, although we will not be sending HA5 to Sunshine), then depending on the concentration of VOCs that would show a relationship between the TPH and VOCs (most of that relationship exists between gas range TPH and BTEX), we would have tried to sample HA1 for VOCs. Since all VOCs were ND, we saw no reason to pursue that sampling as it speaks to a lack of VOCs at HA1.

Yes, all depths will apply, except any AC samples and HA5/HA7.

Hope this helps.

Thanks,

Ryan

From: Kidd, Kelly - Stockton [mailto:KKidd@republicservices.com]
Sent: Wednesday, June 27, 2018 2:39 PM
To: Antolin, Edward <EAntolin@republicservices.com>; Ryan Castillo <Ryan.Castillo@sce.com>; Loveland, Stacy <SLoveland@republicservices.com>
Cc: Riley, Mike <MRiley@republicservices.com>
Subject: (External):RE: (External):Soil - Sunshine Canyon

Good Afternoon Ryan,

I have a couple of quick questions regarding the samples.

Are all depths to be considered for the 2017 samples? For the 2018 samples, why wasn't the HA1 area sampled and tested for VOCs (assuming the names correlate to the originals)?

We may need some clarifications to the profile before we can proceed.

Thank you,

Kelly Kidd
Special Waste Sales Coordinator

1145 West Charter Way
Stockton, CA 95206

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Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Number of Pages	**49**
Date Received	**08/21/2017**
Date Reported	**08/23/2017**

Job Number	Order Date	Client
89062	08/21/2017	SCE

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.
Site: Irwindale Corporate Warehouse
13025 E. Los Angeles St.
Irwindale, CA 91706

Enclosed please find results of analyses of 21 soil and 15 asphalt samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.

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CHAIN OF CUSTODY RECORD

102298

AETL JOB No. 89062

COMPANY: Ecot Associates For S.C.E

PROJECT MANAGER: Helen Thomas / SCE-Christine Brendle

COMPANY ADDRESS: 18231 Irvine Blvd. Tustin, CA. 92780

PHONE:

FAX: 714-289-0995

PROJECT NAME: Irwindale C.W. Paving Alternates

PROJECT #: 17-928 / IO# 337145

SITE NAME AND ADDRESS: Irwindale Corporate Warehouse, 13025 E. Los Angeles St. Irwindale CA.

PO #:

ANALYSIS REQUESTED

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	PCB 8082/1.0	TPH 8015	CAM 17 metals								TEST INSTRUCTIONS & COMMENTS
1	AC1	89062.01	8/21/17	0807	Asphalt	1-8oz	NA	/		/								
2	HA1-0.5'	89062.02	↓	0820	Soil	↓	↓	/	/	/								
3	HA1-0.75	89062.03	↓	0826	Soil	↓	↓	/	/	/								
4	HA1-1.0'	89062.04	↓	0830	Soil	↓	↓	/	/	/								
5	AC2	89062.05	↓	0845	Asphalt	↓	↓	/		/								
6	AC3	89062.06	↓	0856	Asphalt	↓	↓	/		/								
7	AC4	89062.07	↓	0905	Asphalt	↓	↓	/		/								
8	HA2-0.5'	89062.08	↓	0911	Soil	↓	↓	/	/	/								
9	HA2-0.75	89062.09	↓	0915	Soil	↓	↓	/	/	/								
10	HA2-1.0'	89062.10	↓	0920	Soil	↓	↓	/	/	/								
11	AC5	89062.11	↓	0935	Asphalt	↓	↓	/		/								
12	AC6	89062.12	↓	0945	Asphalt	↓	↓	/		/								
13	HA3-0.5'	89062.13	↓	1000	Soil	↓	↓	/	/	/								
14	HA3-0.75	89062.14	↓	1005	Soil	↓	↓	/	/	/								
15	HA3-1.0'	89062.15	↓	1007	Soil	↓	↓	/	/	/								

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	15	PROPERLY COOLED (Y) / N / NA	
CUSTODY SEALS Y / (N) / NA		SAMPLES INTACT (Y) / N / NA	
RECEIVED IN GOOD COND. (Y) / N		SAMPLES ACCEPTED (Y) / N	

TURN AROUND TIME	DATA DELIVERABLE REQUIRED
☐ NORMAL ☒ RUSH ☐ SAME DAY ☐ NEXT DAY ☐ 2 DAYS ☐ 3 DAYS — 48hrs	☐ HARD COPY ☐ PDF ☐ GEOTRACKER (GLOBAL ID) ______ ☐ OTHER (PLEASE SPECIFY) ______

	1.	2.	3.
RELINQUISHED BY	SAMPLER:	RELINQUISHED BY:	RELINQUISHED BY:
Signature	[signature]		[signature]
Printed Name	J. Scott Hawes		C. [illegible]
Date / Time	8/21/17 / 1415		8/21/17 / 1630
RECEIVED BY	RECEIVED BY:	RECEIVED BY:	RECEIVED BY LABORATORY: AETL
Signature	[signature]		[signature]
Printed Name	[illegible]		Antin
Date / Time	8/21/17 / 1415		08/21/17 / 1630

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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CHAIN OF CUSTODY RECORD

102295

COMPANY: ECO & Associates for SCE
PROJECT MANAGER: Helen Thomas SCE-Christine Trendle
COMPANY ADDRESS: 18231 Irvine Blvd. Tustin, CA. 92780
PHONE / FAX: 714-289-0995
PROJECT NAME: Irwindale C.W. Paving Alternate
PROJECT #: 17-928 IO#333145
SITE NAME AND ADDRESS: Irwindale Corporate Warehouse, 13025 E. Los Angeles St. Irwindale CA.
PO #:
AETL JOB No. 89062
Page 2 of 3

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	PCB 8082/1.0'	TPH 8015	CAM17metals
1	AC7	89062.16	8/21/17	1050	Asphalt	1-8oz	NA	/		/
2	AC8	89062.17		1045	Asphalt			/		/
3	HA4-0.5'	89062.18		1050	Soil			/	/	/
4	HA4-0.75	89062.19		1053	Soil			/	/	/
5	HA4-1.0'	89062.20		1100	Soil			/	/	/
6	AC9	89062.21		1110	Asphalt			/		/
7	AC10	89062.22		1120	Asphalt			/		/
8	AC11	89062.23		1135	Asphalt			/		/
9	HA5-0.5'	89062.24		1145	Soil			/	/	/
10	HA5-0.75'	89062.25		1150	Soil			/	/	/
11	HA5-1.0'	89062.26		1155	Soil			/	/	/
12	AC12	89062.27		1205	Asphalt			/		/
13	AC13	89062.28		1225	Asphalt			/		/
14	HA6-0.5'	89062.29		1230	Soil			/	/	/
15	HA6-0.75'	89062.30		1235	Soil			/	/	/

ANALYSIS REQUESTED

TEST INSTRUCTIONS & COMMENTS

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	15	PROPERLY COOLED (Y) / N / NA	
CUSTODY SEALS Y / (N) / NA		SAMPLES INTACT (Y) / N / NA	
RECEIVED IN GOOD COND. (Y) / N		SAMPLES ACCEPTED (Y) / N	

TURN AROUND TIME

☐ NORMAL ☒ RUSH 4/8hrs
☐ SAME DAY
☐ NEXT DAY
☐ 2 DAYS
☐ 3 DAYS

DATA DELIVERABLE REQUIRED

☐ HARD COPY
☐ PDF
☐ GEOTRACKER (GLOBAL ID) _____
☐ OTHER (PLEASE SPECIFY) _____

	RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature:			
Printed Name:	D. Scott Howes		C. Padilla
Date / Time:	8/21/17 1415		8/21/17 1630
	RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY LABORATORY: AETL 3.**
Signature:			
Printed Name:	C. Padilla		Andin
Date / Time:	8/21/17 1415		8/21/17 1630

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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CHAIN OF CUSTODY RECORD

102305

AETL JOB No. 89062

Page 1 of 1

COMPANY: Eco & Associates For S.C.E.
PROJECT MANAGER: Helen Thomas SCE- Christine Brawlie
COMPANY ADDRESS: 18231 Irvine Blvd. Tustin, CA, 92780
PHONE / FAX: 714-289-0995
PROJECT NAME: Irwindale C.W. Paving Alternate
PROJECT #: 17-928 IO# 337045
SITE NAME AND ADDRESS: Irwindale Corporate Warhose 13025 E. Los Angeles St Irwindale CA.
PO #:

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	PCB 8082 1.0	TPH 8015	CAM 17 metals
1	HA6-1.0'	89062.31	8/21/16	1300	Soil	1-8oz	NA	/	/	/
2	AC14	89062.32		1310	Asphalt			/		/
3	AC15	89062.33		1325	Asphalt			/		/
4	HA7-0.5'	89062.34		1333	Soil			/	/	/
5	HA7-0.75	89062.35		1336	Soil			/	/	/
6	HA7-1.0'	89062.36		1339	Soil			/	/	/
7										
8										
9										
10										
11										
12										
13										
14										
15										

ANALYSIS REQUESTED

TEST INSTRUCTIONS & COMMENTS

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	6	PROPERLY COOLED (Y) / N / NA	
CUSTODY SEALS Y (N) / NA		SAMPLES INTACT (Y) / N / NA	
RECEIVED IN GOOD COND. (Y) / N		SAMPLES ACCEPTED (Y) / N	

TURN AROUND TIME

☐ NORMAL ☒ RUSH 48hrs ☐ SAME DAY ☐ NEXT DAY ☐ 2 DAYS ☐ 3 DAYS

DATA DELIVERABLE REQUIRED

☐ HARD COPY ☐ PDF ☐ GEOTRACKER (GLOBAL ID) _____ ☐ OTHER (PLEASE SPECIFY) _____

RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature:	Signature:	Signature:
Printed Name: J. Scott Hawes	Printed Name:	Printed Name: C. Padilla
Date: 8/21/17 Time: 1415	Date: Time:	Date: 8/21/17 Time: 1630
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY LABORATORY: AETL 3.**
Signature:	Signature:	Signature:
Printed Name: Charlene Padilla	Printed Name:	Printed Name:
Date: 8/21/17 Time: 1415	Date: Time:	Date: 8/21/17 Time: 1630

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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COOLER RECEIPT FORM

Client Name: Edison
Project Name:
AETL Job Number: 89062
Date Received: 08/21/17 Received by: Austin
Carrier: ☒ AETL Courier ☐ Client ☐ GSO ☐ FedEx ☐ UPS
☐ Others:

Samples were received in: ☒ Cooler (1) ☐ Other (Specify):
Inside temperature of shipping container No 1: 3.2°, No 2: _____, No 3: _____
Type of sample containers: ☐ VOA, ☐ Glass bottles, ☒ Wide mouth jars, ☐ HDPE bottles, ☐ Metal sleeves, ☐ Others (Specify): _____
How are samples preserved: ☐ None, ☒ Ice , ☐ Blue Ice, ☐ Dry Ice
X None, _ HNO_3, _ NaOH, _ ZnOAc, _ HCl, _ $Na_2S_2O_3$, _ MeOH
_ Other (Specify):

	Yes	No, explain below	Name, if client was notified.
1. Are the COCs Correct?	Y		
2. Are the Sample labels legible?	Y		
3. Do samples match the COC?	Y		
4. Are the required analyses clear?	Y		
5. Is there enough samples for required analysis?	Y		
6. Are samples sealed with evidence tape?		Y	
7. Are sample containers in good condition?	Y		
8. Are samples preserved?	Y		
9. Are samples preserved properly for the intended analysis?	Y		
10. Are the VOAs free of headspace?	Y		
11. Are the jars free of headspace?	N/A		

Explain all "No" answers for above questions:

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Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337145
Date Received 08/21/2017
Date Reported 08/23/2017

Job Number	Order Date	Client
89062	08/21/2017	SCE

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 36 samples with the following specification on 08/21/2017.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89062.02	HA1-0.5'	08/21/2017	Soil	1
89062.03	HA1-0.75'	08/21/2017	Soil	1
89062.04	HA1-1.0'	08/21/2017	Soil	1
89062.08	HA2-0.5'	08/21/2017	Soil	1
89062.09	HA2-0.75'	08/21/2017	Soil	1
89062.10	HA2-1.0'	08/21/2017	Soil	1
89062.13	HA3-0.5'	08/21/2017	Soil	1
89062.14	HA3-0.75'	08/21/2017	Soil	1
89062.15	HA3-1.0'	08/21/2017	Soil	1
89062.18	HA4-0.5'	08/21/2017	Soil	1
89062.19	HA4-0.75'	08/21/2017	Soil	1
89062.20	HA4-1.0'	08/21/2017	Soil	1
89062.24	HA5-0.5'	08/21/2017	Soil	1
89062.25	HA5-0.75'	08/21/2017	Soil	1
89062.26	HA5-1.0'	08/21/2017	Soil	1
89062.29	HA6-0.5'	08/21/2017	Soil	1
89062.30	HA6-0.75'	08/21/2017	Soil	1
89062.31	HA6-1.0'	08/21/2017	Soil	1
89062.34	HA7-0.5'	08/21/2017	Soil	1
89062.35	HA7-0.75'	08/21/2017	Soil	1
89062.36	HA7-1.0'	08/21/2017	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(6010B/7000CAM) ^ SCE	08/23/2017	3	Rush	mg/Kg
(8082) ^ SCE-1PPM	08/23/2017	3	Rush	mg/Kg
(M8015D) ^ SCE-C13C40	08/23/2017	3	Rush	mg/Kg
(M8015G) ^ SCE-C4-C12	08/23/2017	3	Rush	mg/Kg

Continued

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Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337145
Date Received 08/21/2017
Date Reported 08/23/2017

Job Number	Order Date	Client
89062	08/21/2017	SCE

CERTIFICATE OF ANALYSIS

CASE NARRATIVE

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
89062.01	AC1	08/21/2017	Solid	1
89062.05	AC2	08/21/2017	Solid	1
89062.06	AC3	08/21/2017	Solid	1
89062.07	AC4	08/21/2017	Solid	1
89062.11	AC5	08/21/2017	Solid	1
89062.12	AC6	08/21/2017	Solid	1
89062.16	AC7	08/21/2017	Solid	1
89062.17	AC8	08/21/2017	Solid	1
89062.21	AC9	08/21/2017	Solid	1
89062.22	AC10	08/21/2017	Solid	1
89062.23	AC11	08/21/2017	Solid	1
89062.27	AC12	08/21/2017	Solid	1
89062.28	AC13	08/21/2017	Solid	1
89062.32	AC14	08/21/2017	Solid	1
89062.33	AC15	08/21/2017	Solid	1

Method ^ Submethod	*Req Date*	*Priority*	*TAT*	*Units*
(6010B/7000CAM) ^ SCE	08/23/2017	3	Rush	mg/Kg
(8082) ^ SCE-1PPM	08/23/2017	3	Rush	mg/Kg

The samples were analyzed as specified on the enclosed chain of custody. Analytical non-conformances have been noted on the report.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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Telephone: (909)274-1646
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Page: **2**

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 082217NB1

Our Lab I.D.			Method Blank	**89062.02**	**89062.03**	**89062.04**	**89062.08**
Client Sample I.D.				HA1-0.5'	HA1-0.75'	HA1-1.0'	HA2-0.5'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**89062.02**	**89062.03**	**89062.04**	**89062.08**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		97.8	94.8	103	103	96.0

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 0822GNB1

Our Lab I.D.			89062.09	89062.10	89062.13	89062.14	89062.15
Client Sample I.D.			HA2-0.75'	HA2-1.0'	HA3-0.5'	HA3-0.75'	HA3-1.0'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND	ND	ND
Our Lab I.D.			**89062.09**	**89062.10**	**89062.13**	**89062.14**	**89062.15**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		98.6	97.8	95.2	101	102

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 0822MB1

Our Lab I.D.			89062.18	89062.19			
Client Sample I.D.			HA4-0.5'	HA4-0.75'			
Date Sampled			08/21/2017	08/21/2017			
Date Prepared			08/22/2017	08/22/2017			
Preparation Method			5030	5030			
Date Analyzed			08/22/2017	08/22/2017			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND			
Our Lab I.D.			89062.18	89062.19			
Surrogates	%Rec.Limit		% Rec.	% Rec.			
Bromofluorobenzene	75-125		96.8	102			

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 082217NB2

Our Lab I.D.			Method Blank	89062.20	89062.24	89062.25	89062.26
Client Sample I.D.				HA4-1.0'	HA5-0.5'	HA5-0.75'	HA5-1.0'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			08/23/2017	08/22/2017	08/22/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**89062.20**	**89062.24**	**89062.25**	**89062.26**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		108	99.6	96.8	99.0	94.6

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 08221MB2

Our Lab I.D.			89062.29	89062.30	89062.31	89062.34	89062.35
Client Sample I.D.			HA6-0.5'	HA6-0.75'	HA6-1.0'	HA7-0.5'	HA7-0.75'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND	ND	ND	ND	ND
Our Lab I.D.			**89062.29**	**89062.30**	**89062.31**	**89062.34**	**89062.35**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		99.2	97.8	95.6	99.8	102

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 082217NB2

Our Lab I.D.			**89062.36**				
Client Sample I.D.			HA7-1.0'				
Date Sampled			08/21/2017				
Date Prepared			08/22/2017				
Preparation Method			5030				
Date Analyzed			08/23/2017				
Matrix			Soil				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
TPH as Gasoline and Light HC. (C4-C12)	10.0	10.0	ND				
Our Lab I.D.			**89062.36**				
Surrogates	**%Rec.Limit**		**% Rec.**				
Bromofluorobenzene	75-125		99.0				

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 082217PB1

Our Lab I.D.			Method Blank	89062.02	89062.03	89062.04	89062.08
Client Sample I.D.				HA1-0.5'	HA1-0.75'	HA1-1.0'	HA2-0.5'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	10.0	10.0	ND	122	90.5	ND	27.1
TPH as Heavy Hydrocarbons (C23-C40)	100	100	ND	1,460	1,020	ND	539
TPH Total as Diesel and Heavy HC.C13-C40	100	100	ND	1,580	1,110	ND	566
Our Lab I.D.			Method Blank	89062.02	89062.03	89062.04	89062.08
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Chlorobenzene	75-125		118	120	118	124	115

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 0822[illegible]PB1

Our Lab I.D.			89062.09	89062.10	89062.13	89062.14	89062.15
Client Sample I.D.			HA2-0.75'	HA2-1.0'	HA3-0.5'	HA3-0.75'	HA3-1.0'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	10.0	10.0	22.8	25.1	25.8	43.9	ND
TPH as Heavy Hydrocarbons (C23-C40)	100	100	211	508	476	722	ND
TPH Total as Diesel and Heavy HC.C13-C40	100	100	234	533	502	766	ND
Our Lab I.D.			89062.09	89062.10	89062.13	89062.14	89062.15
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Chlorobenzene	75-125		114	112	113	115	112

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Page: **10**

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 0822 PB1

Our Lab I.D.			**89062.18**	**89062.19**	**89062.20**	**89062.24**	**89062.25**
Client Sample I.D.			HA4-0.5'	HA4-0.75'	HA4-1.0'	HA5-0.5'	HA5-0.75'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	10.0	10.0	12.1	12.7	ND	47.5	196
TPH as Heavy Hydrocarbons (C23-C40)	100	100	311	278	ND	1,100	2,570
TPH Total as Diesel and Heavy HC.C13-C40	100	100	323	291	ND	1,150	2,770
Our Lab I.D.			**89062.18**	**89062.19**	**89062.20**	**89062.24**	**89062.25**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		112	113	111	118	117

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 082217PB1

Our Lab I.D.			89062.26	89062.29	89062.30	89062.31	
Client Sample I.D.			HA5-1.0'	HA6-0.5'	HA6-0.75'	HA6-1.0'	
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	
Preparation Method			3550B	3550B	3550B	3550B	
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	
Matrix			Soil	Soil	Soil	Soil	
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH as Diesel (C13-C22)	10.0	10.0	70.4	116	67.0	ND	
TPH as Heavy Hydrocarbons (C23-C40)	100	100	1,140	1,510	1,090	ND	
TPH Total as Diesel and Heavy HC.C13-C40	100	100	1,210	1,630	1,160	ND	
Our Lab I.D.			89062.26	89062.29	89062.30	89062.31	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Chlorobenzene	75-125		121	116	117	125	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 082217PB2

Our Lab I.D.			Method Blank	89062.34	89062.35	89062.36	
Client Sample I.D.				HA7-0.5'	HA7-0.75'	HA7-1.0'	
Date Sampled				08/21/2017	08/21/2017	08/21/2017	
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	
Preparation Method			3550B	3550B	3550B	3550B	
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	
Matrix			Soil	Soil	Soil	Soil	
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH as Diesel (C13-C22)	10.0	10.0	ND	42.9	52.0	50.4	
TPH as Heavy Hydrocarbons (C23-C40)	100	100	ND	624	317	231	
TPH Total as Diesel and Heavy HC.C13-C40	100	100	ND	667	369	281	
Our Lab I.D.			Method Blank	89062.34	89062.35	89062.36	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Chlorobenzene	75-125		116	125	125	123	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-2

Our Lab I.D.			Method Blank	**89062.02**	**89062.03**	**89062.04**	**89062.08**
Client Sample I.D.				HA1-0.5'	HA1-0.75'	HA1-1.0'	HA2-0.5'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**89062.02**	**89062.03**	**89062.04**	**89062.08**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		102	128	120	95.6	113
Tetrachloro-m-xylene	30-150		90.6	125	104	91.4	101

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082[illegible]7-2

Our Lab I.D.			89062.09	89062.10	89062.13	89062.14	89062.15
Client Sample I.D.			HA2-0.75'	HA2-1.0'	HA3-0.5'	HA3-0.75'	HA3-1.0'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			89062.09	89062.10	89062.13	89062.14	89062.15
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		101	128	123	72.4	113
Tetrachloro-m-xylene	30-150		95.0	100	105	100	116

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082[illegible]7-2

Our Lab I.D.			89062.18				
Client Sample I.D.			HA4-0.5'				
Date Sampled			08/21/2017				
Date Prepared			08/22/2017				
Preparation Method			3550B				
Date Analyzed			08/22/2017				
Matrix			Soil				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Aroclor-1016 (PCB-1016)	1.0	1.0	ND				
Aroclor-1221 (PCB-1221)	1.0	1.0	ND				
Aroclor-1232 (PCB-1232)	1.0	1.0	ND				
Aroclor-1242 (PCB-1242)	1.0	1.0	ND				
Aroclor-1248 (PCB-1248)	1.0	1.0	ND				
Aroclor-1254 (PCB-1254)	1.0	1.0	ND				
Aroclor-1260 (PCB-1260)	1.0	1.0	ND				
Aroclor-1262 (PCB-1262)	1.0	1.0	ND				
Aroclor-1268 (PCB-1268)	1.0	1.0	ND				
Our Lab I.D.			89062.18				
Surrogates	%Rec.Limit		% Rec.				
Decachlorobiphenyl	30-150		123				
Tetrachloro-m-xylene	30-150		127				

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3

Our Lab I.D.			Method Blank	**89062.19**	**89062.20**	**89062.24**	**89062.25**
Client Sample I.D.				HA4-0.75'	HA4-1.0'	HA5-0.5'	HA5-0.75'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**89062.19**	**89062.20**	**89062.24**	**89062.25**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		104	123	119	128	91.8
Tetrachloro-m-xylene	30-150		97.8	117	142	134	131

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3

Our Lab I.D.			89062.26	89062.29	89062.30	89062.31	89062.34
Client Sample I.D.			HA5-1.0'	HA6-0.5'	HA6-0.75'	HA6-1.0'	HA7-0.5'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	1.26	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			**89062.26**	**89062.29**	**89062.30**	**89062.31**	**89062.34**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		125	94.0	89.8	117	130
Tetrachloro-m-xylene	30-150		127	150	120	120	105

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3

Our Lab I.D.			89062.35	89062.36			
Client Sample I.D.			HA7-0.75'	HA7-1.0'			
Date Sampled			08/21/2017	08/21/2017			
Date Prepared			08/22/2017	08/22/2017			
Preparation Method			3550B	3550B			
Date Analyzed			08/23/2017	08/23/2017			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND			
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND			
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND			
Aroclor-1242 (PCB-1242)	1.0	1.0	3.96	4.89			
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND			
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND			
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND			
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND			
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND			
Our Lab I.D.			89062.35	89062.36			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
Decachlorobiphenyl	30-150		132	139			
Tetrachloro-m-xylene	30-150		106	129			

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-2A

Our Lab I.D.			Method Blank	89062.01	89062.05	89062.06	89062.07
Client Sample I.D.				AC1	AC2	AC3	AC4
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Matrix			Solid	Solid	Solid	Solid	Solid
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	89062.01	89062.05	89062.06	89062.07
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		102	96.0	61.8	70.3	70.0
Tetrachloro-m-xylene	30-150		90.6	125	80.0	101	90.2

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-2A

Our Lab I.D.			89062.11	89062.12	89062.16	89062.17	
Client Sample I.D.			AC5	AC6	AC7	AC8	
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	
Preparation Method			3550B	3550B	3550B	3550B	
Date Analyzed			08/22/2017	08/22/2017	08/22/2017	08/22/2017	
Matrix			Solid	Solid	Solid	Solid	
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	
Our Lab I.D.			89062.11	89062.12	89062.16	89062.17	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Decachlorobiphenyl	30-150		106	89.2	82.6	148	
Tetrachloro-m-xylene	30-150		112	106	121	128	

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13025 E. Los Angeles St.
Irwindale, CA 91706

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3A

Our Lab I.D.			Method Blank	89062.21	89062.22	89062.23	89062.27
Client Sample I.D.				AC9	AC10	AC11	AC12
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Solid	Solid	Solid	Solid	Solid
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	89062.21	89062.22	89062.23	89062.27
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		104	139	83.2	72.0	126
Tetrachloro-m-xylene	30-150		97.8	122	101	116	131

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3A

Our Lab I.D.			89062.28	89062.32	89062.33		
Client Sample I.D.			AC13	AC14	AC15		
Date Sampled			08/21/2017	08/21/2017	08/21/2017		
Date Prepared			08/22/2017	08/22/2017	08/22/2017		
Preparation Method			3550B	3550B	3550B		
Date Analyzed			08/23/2017	08/23/2017	08/23/2017		
Matrix			Solid	Solid	Solid		
Units			mg/Kg	mg/Kg	mg/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aroclor-1016 (PCB-1016)	1.0	1.0	ND	ND	ND		
Aroclor-1221 (PCB-1221)	1.0	1.0	ND	ND	ND		
Aroclor-1232 (PCB-1232)	1.0	1.0	ND	ND	ND		
Aroclor-1242 (PCB-1242)	1.0	1.0	ND	ND	ND		
Aroclor-1248 (PCB-1248)	1.0	1.0	ND	ND	ND		
Aroclor-1254 (PCB-1254)	1.0	1.0	ND	ND	ND		
Aroclor-1260 (PCB-1260)	1.0	1.0	ND	ND	ND		
Aroclor-1262 (PCB-1262)	1.0	1.0	ND	ND	ND		
Aroclor-1268 (PCB-1268)	1.0	1.0	ND	ND	ND		
Our Lab I.D.			89062.28	89062.32	89062.33		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
Decachlorobiphenyl	30-150		142	93.4	88.5		
Tetrachloro-m-xylene	30-150		139	136	121		

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C3

Our Lab I.D.			Method Blank	89062.02	89062.03	89062.04	89062.08
Client Sample I.D.				HA1-0.5'	HA1-0.75'	HA1-1.0'	HA2-0.5'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	ND	ND
Barium	5.0	5.0	ND	90.9	113	73.5	82.7
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	ND	11.8	13.0	11.6	11.4
Cobalt	5.0	5.0	ND	ND	ND	8.32	7.91
Copper	5.0	5.0	ND	17.3	19.4	17.8	17.7
Lead	5.0	5.0	ND	16.1	22.6	ND	6.60
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	0.551	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	ND	8.71	8.65	8.83	9.71
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	ND	23.5	23.2	31.6	32.6
Zinc	5.0	5.0	ND	72.2	86.7	39.3	46.2

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822 2C3

Our Lab I.D.			89062.09	89062.10	89062.13	89062.14	89062.15
Client Sample I.D.			HA2-0.75'	HA2-1.0'	HA3-0.5'	HA3-0.75'	HA3-1.0'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	ND	ND
Barium	5.0	5.0	84.3	77.7	51.7	69.4	34.5
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	14.6	11.7	7.04	7.18	5.54
Cobalt	5.0	5.0	9.04	6.56	ND	ND	ND
Copper	5.0	5.0	21.6	18.4	10.8	10.4	7.04
Lead	5.0	5.0	12.8	18.5	ND	ND	ND
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	11.2	9.49	5.58	6.45	ND
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	34.0	26.3	17.6	19.3	14.2
Zinc	5.0	5.0	56.4	62.4	28.5	30.0	21.5

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822W2C3

Our Lab I.D.			89062.18				
Client Sample I.D.			HA4-0.5'				
Date Sampled			08/21/2017				
Date Prepared			08/22/2017				
Preparation Method			3050B				
Date Analyzed			08/23/2017				
Matrix			Soil				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Antimony	5.0	5.0	ND				
Arsenic	2.5	2.5	ND				
Barium	5.0	5.0	80.3				
Beryllium	2.5	2.5	ND				
Cadmium	2.5	2.5	ND				
Chromium	5.0	5.0	11.5				
Cobalt	5.0	5.0	5.86				
Copper	5.0	5.0	19.2				
Lead	5.0	5.0	21.0				
Mercury (By EPA 7471)	0.2	0.2	ND				
Molybdenum	5.0	5.0	ND				
Nickel	5.0	5.0	8.80				
Selenium	5.0	5.0	ND				
Silver	5.0	5.0	ND				
Thallium	5.0	5.0	ND				
Vanadium	5.0	5.0	22.3				
Zinc	5.0	5.0	68.3				

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C4

Our Lab I.D.			Method Blank	89062.19	89062.20	89062.24	89062.25
Client Sample I.D.				HA4-0.75'	HA4-1.0'	HA5-0.5'	HA5-0.75'
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	ND	ND
Barium	5.0	5.0	ND	61.7	69.3	94.5	86.8
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	ND	10.5	11.6	11.1	10.5
Cobalt	5.0	5.0	ND	6.15	6.53	7.12	6.58
Copper	5.0	5.0	ND	12.5	14.6	16.3	15.6
Lead	5.0	5.0	ND	10.1	28.6	10.2	10.0
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	ND	8.69	9.14	9.26	10.8
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	ND	21.5	23.0	29.3	27.9
Zinc	5.0	5.0	ND	47.4	58.2	46.3	46.0

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C4

Our Lab I.D.			89062.26	89062.29	89062.30	89062.31	89062.34
Client Sample I.D.			HA5-1.0'	HA6-0.5'	HA6-0.75'	HA6-1.0'	HA7-0.5'
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	8.06	ND	ND	ND
Barium	5.0	5.0	79.0	72.5	76.6	75.2	86.2
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	10.9	9.63	11.3	10.2	10.5
Cobalt	5.0	5.0	6.94	6.13	6.83	7.37	7.83
Copper	5.0	5.0	17.5	13.5	14.8	15.4	15.1
Lead	5.0	5.0	8.55	6.93	6.57	5.81	5.42
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	10.8	8.43	8.97	8.21	9.05
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	27.4	28.7	29.9	28.3	31.6
Zinc	5.0	5.0	47.9	36.4	37.7	38.1	41.8

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C4

Our Lab I.D.			89062.35	89062.36			
Client Sample I.D.			HA7-0.75'	HA7-1.0'			
Date Sampled			08/21/2017	08/21/2017			
Date Prepared			08/22/2017	08/22/2017			
Preparation Method			3050B	3050B			
Date Analyzed			08/23/2017	08/23/2017			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Antimony	5.0	5.0	ND	ND			
Arsenic	2.5	2.5	ND	ND			
Barium	5.0	5.0	86.4	91.2			
Beryllium	2.5	2.5	ND	ND			
Cadmium	2.5	2.5	ND	ND			
Chromium	5.0	5.0	12.4	12.5			
Cobalt	5.0	5.0	8.42	8.64			
Copper	5.0	5.0	19.7	19.2			
Lead	5.0	5.0	10.0	9.12			
Mercury (By EPA 7471)	0.2	0.2	ND	ND			
Molybdenum	5.0	5.0	ND	ND			
Nickel	5.0	5.0	10.2	10.0			
Selenium	5.0	5.0	ND	ND			
Silver	5.0	5.0	ND	ND			
Thallium	5.0	5.0	ND	ND			
Vanadium	5.0	5.0	31.9	32.0			
Zinc	5.0	5.0	49.3	47.5			

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C5

Our Lab I.D.			Method Blank	89062.01	89062.05	89062.06	89062.07
Client Sample I.D.				AC1	AC2	AC3	AC4
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Solid	Solid	Solid	Solid	Solid
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	2.53	ND
Barium	5.0	5.0	ND	88.8	70.7	66.1	129
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	ND	9.64	6.33	5.78	6.06
Cobalt	5.0	5.0	ND	6.70	5.62	ND	5.72
Copper	5.0	5.0	ND	20.5	12.4	14.8	35.2
Lead	5.0	5.0	ND	5.47	ND	ND	ND
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	ND	13.6	11.4	13.6	12.3
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	ND	26.1	21.3	21.0	31.9
Zinc	5.0	5.0	ND	60.2	65.0	32.5	33.0

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C5

Our Lab I.D.			89062.11	89062.12	89062.16	89062.17	89062.21
Client Sample I.D.			AC5	AC6	AC7	AC8	AC9
Date Sampled			08/21/2017	08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Solid	Solid	Solid	Solid	Solid
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	ND	ND
Barium	5.0	5.0	63.9	54.1	40.7	77.0	51.8
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	10.8	26.8	ND	6.97	ND
Cobalt	5.0	5.0	7.16	ND	ND	5.45	ND
Copper	5.0	5.0	23.1	8.53	5.60	23.1	13.5
Lead	5.0	5.0	ND	ND	ND	ND	ND
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	16.8	10.8	7.44	13.5	11.5
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	31.5	25.5	17.1	32.5	25.6
Zinc	5.0	5.0	55.0	26.7	28.0	36.4	29.9

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C5

Our Lab I.D.			**89062.22**				
Client Sample I.D.			AC10				
Date Sampled			08/21/2017				
Date Prepared			08/22/2017				
Preparation Method			3050B				
Date Analyzed			08/23/2017				
Matrix			Solid				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Antimony	5.0	5.0	ND				
Arsenic	2.5	2.5	ND				
Barium	5.0	5.0	38.6				
Beryllium	2.5	2.5	ND				
Cadmium	2.5	2.5	ND				
Chromium	5.0	5.0	ND				
Cobalt	5.0	5.0	ND				
Copper	5.0	5.0	7.81				
Lead	5.0	5.0	ND				
Mercury (By EPA 7471)	0.2	0.2	ND				
Molybdenum	5.0	5.0	ND				
Nickel	5.0	5.0	9.50				
Selenium	5.0	5.0	ND				
Silver	5.0	5.0	ND				
Thallium	5.0	5.0	ND				
Vanadium	5.0	5.0	20.6				
Zinc	5.0	5.0	22.2				

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C6

Our Lab I.D.			Method Blank	89062.23	89062.27	89062.28	89062.32
Client Sample I.D.				AC11	AC12	AC13	AC14
Date Sampled				08/21/2017	08/21/2017	08/21/2017	08/21/2017
Date Prepared			08/22/2017	08/22/2017	08/22/2017	08/22/2017	08/22/2017
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			08/23/2017	08/23/2017	08/23/2017	08/23/2017	08/23/2017
Matrix			Solid	Solid	Solid	Solid	Solid
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Antimony	5.0	5.0	ND	ND	ND	ND	ND
Arsenic	2.5	2.5	ND	ND	ND	ND	ND
Barium	5.0	5.0	ND	78.4	66.8	67.0	50.3
Beryllium	2.5	2.5	ND	ND	ND	ND	ND
Cadmium	2.5	2.5	ND	ND	ND	ND	ND
Chromium	5.0	5.0	ND	ND	ND	5.12	ND
Cobalt	5.0	5.0	ND	ND	ND	ND	ND
Copper	5.0	5.0	ND	11.4	12.4	12.0	10.1
Lead	5.0	5.0	ND	ND	ND	ND	ND
Mercury (By EPA 7471)	0.2	0.2	ND	ND	ND	ND	ND
Molybdenum	5.0	5.0	ND	ND	ND	ND	ND
Nickel	5.0	5.0	ND	9.34	9.15	10.0	8.48
Selenium	5.0	5.0	ND	ND	ND	ND	ND
Silver	5.0	5.0	ND	ND	ND	ND	ND
Thallium	5.0	5.0	ND	ND	ND	ND	ND
Vanadium	5.0	5.0	ND	50.1	53.8	39.4	53.3
Zinc	5.0	5.0	ND	25.5	26.5	35.6	31.8

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C6

Our Lab I.D.			**89062.33**				
Client Sample I.D.			AC15				
Date Sampled			08/21/2017				
Date Prepared			08/22/2017				
Preparation Method			3050B				
Date Analyzed			08/23/2017				
Matrix			Solid				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Antimony	5.0	5.0	ND				
Arsenic	2.5	2.5	ND				
Barium	5.0	5.0	128				
Beryllium	2.5	2.5	ND				
Cadmium	2.5	2.5	ND				
Chromium	5.0	5.0	6.62				
Cobalt	5.0	5.0	6.05				
Copper	5.0	5.0	15.7				
Lead	5.0	5.0	ND				
Mercury (By EPA 7471)	0.2	0.2	ND				
Molybdenum	5.0	5.0	ND				
Nickel	5.0	5.0	11.7				
Selenium	5.0	5.0	ND				
Silver	5.0	5.0	ND				
Thallium	5.0	5.0	ND				
Vanadium	5.0	5.0	47.9				
Zinc	5.0	5.0	37.8				

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C3; Dup or Spiked Sample: 89062.02; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Antimony	0.00	50.0	48.7	97.4	50.0	48.2	96.4	1.0	75-125	<15
Arsenic	0.00	50.0	49.0	98.0	50.0	49.7	99.4	1.4	75-125	<15
Barium	90.9	50.0	146	110	50.0	146	110	<1	75-125	<15
Beryllium	0.00	50.0	51.0	102	50.0	51.0	102	<1	75-125	<15
Cadmium	0.00	50.0	44.0	88.0	50.0	43.7	87.4	<1	75-125	<15
Chromium	11.8	50.0	58.0	92.4	50.0	57.7	91.8	<1	75-125	<15
Cobalt	0.00	50.0	47.5	95.0	50.0	47.3	94.6	<1	75-125	<15
Copper	17.3	50.0	67.3	100	50.0	67.3	100	<1	75-125	<15
Lead	16.1	50.0	55.6	79.0	50.0	55.2	78.2	1.0	75-125	<15
Mercury (By EPA 7471)	0.0500	0.500	0.625	115	0.500	0.615	113	1.8	75-125	<15
Molybdenum	0.00	50.0	45.5	91.0	50.0	45.3	90.6	<1	75-125	<15
Nickel	8.71	50.0	49.9	82.4	50.0	49.7	82.0	<1	75-125	<15
Selenium	0.00	50.0	41.9	83.8	50.0	41.0	82.0	2.2	75-125	<15
Silver	0.00	50.0	48.0	96.0	50.0	48.0	96.0	<1	75-125	<15
Thallium	0.00	50.0	36.2 #	72.4	50.0	36.7 #	73.4	1.4	75-125	<15
Vanadium	23.5	50.0	72.0	97.0	50.0	72.0	97.0	<1	75-125	<15
Zinc	72.2	50.0	113	81.6	50.0	113	81.6	<1	75-125	<15

QC Batch No: 0822172C3; Dup or Spiked Sample: 89062.02; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Antimony	50.0	50.0	100	50.0	50.5	101	<1	75-125	<15	
Arsenic	50.0	49.8	99.6	50.0	50.0	100	<1	75-125	<15	
Barium	50.0	51.5	103	50.0	50.5	101	2.0	75-125	<15	
Beryllium	50.0	55.0	110	50.0	55.0	110	<1	75-125	<15	
Cadmium	50.0	51.0	102	50.0	50.5	101	<1	75-125	<15	
Chromium	50.0	51.0	102	50.0	51.5	103	<1	75-125	<15	
Cobalt	50.0	51.0	102	50.0	50.0	100	2.0	75-125	<15	
Copper	50.0	51.5	103	50.0	50.5	101	2.0	75-125	<15	
Lead	50.0	48.5	97.0	50.0	49.2	98.4	1.4	75-125	<15	

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QUALITY CONTROL RESULTS

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C3; Dup or Spiked Sample: 89062.02; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Mercury (By EPA 7471)	0.500	0.560	112	0.500	0.560	112	<1	75-125	<15	
Molybdenum	50.0	49.0	98.0	50.0	49.4	98.8	<1	75-125	<15	
Nickel	50.0	49.5	99.0	50.0	48.7	97.4	1.6	75-125	<15	
Selenium	50.0	51.5	103	50.0	51.0	102	<1	75-125	<15	
Silver	50.0	52.0	104	50.0	51.0	102	1.9	75-125	<15	
Thallium	50.0	51.5	103	50.0	51.5	103	<1	75-125	<15	
Vanadium	50.0	51.0	102	50.0	50.0	100	2.0	75-125	<15	
Zinc	50.0	52.5	105	50.0	51.5	103	1.9	75-125	<15	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C4; Dup or Spiked Sample: 89062.19; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Antimony	0.00	50.0	49.5	99.0	50.0	49.2	98.4	<1	75-125	<15
Arsenic	0.00	50.0	48.0	96.0	50.0	47.9	95.8	<1	75-125	<15
Barium	61.7	50.0	110	96.6	50.0	110	96.6	<1	75-125	<15
Beryllium	0.00	50.0	54.5	109	50.0	54.0	108	<1	75-125	<15
Cadmium	0.00	50.0	49.5	99.0	50.0	49.6	99.2	<1	75-125	<15
Chromium	10.5	50.0	60.0	99.0	50.0	60.1	99.2	<1	75-125	<15
Cobalt	6.15	50.0	54.1	95.9	50.0	54.2	96.1	<1	75-125	<15
Copper	12.5	50.0	65.0	105	50.0	65.0	105	<1	75-125	<15
Lead	10.1	50.0	53.9	87.6	50.0	54.3	88.4	<1	75-125	<15
Mercury (By EPA 7471)	0.0110	0.500	0.480	93.8	0.500	0.486	95.0	1.3	75-125	<15
Molybdenum	0.00	50.0	49.3	98.6	50.0	49.4	98.8	<1	75-125	<15
Nickel	8.69	50.0	54.3	91.2	50.0	54.4	91.4	<1	75-125	<15
Selenium	0.00	50.0	43.2	86.4	50.0	42.6	85.2	1.4	75-125	<15
Silver	0.00	50.0	49.1	98.2	50.0	49.0	98.0	<1	75-125	<15
Thallium	0.00	50.0	42.3	84.6	50.0	42.3	84.6	<1	75-125	<15
Vanadium	21.5	50.0	71.2	99.4	50.0	71.0	99.0	<1	75-125	<15
Zinc	47.4	50.0	93.0	91.2	50.0	92.9	91.0	<1	75-125	<15

QC Batch No: 0822172C4; Dup or Spiked Sample: 89062.19; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Antimony	50.0	51.0	102	50.0	51.0	102	<1	75-125	<15	
Arsenic	50.0	50.5	101	50.0	51.5	103	2.0	75-125	<15	
Barium	50.0	51.5	103	50.0	52.0	104	<1	75-125	<15	
Beryllium	50.0	56.0	112	50.0	55.5	111	<1	75-125	<15	
Cadmium	50.0	51.5	103	50.0	52.0	104	<1	75-125	<15	
Chromium	50.0	49.9	99.8	50.0	52.5	105	5.1	75-125	<15	
Cobalt	50.0	51.5	103	50.0	51.5	103	<1	75-125	<15	
Copper	50.0	51.0	102	50.0	52.0	104	1.9	75-125	<15	
Lead	50.0	49.3	98.6	50.0	49.5	99.0	<1	75-125	<15	

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QUALITY CONTROL RESULTS

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C4; Dup or Spiked Sample: 89062.19; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Mercury (By EPA 7471)	0.500	0.448	89.6	0.500	0.456	91.2	1.8	75-125	<15	
Molybdenum	50.0	50.0	100	50.0	50.0	100	<1	75-125	<15	
Nickel	50.0	49.8	99.6	50.0	50.5	101	1.4	75-125	<15	
Selenium	50.0	51.0	102	50.0	52.0	104	1.9	75-125	<15	
Silver	50.0	51.5	103	50.0	52.5	105	1.9	75-125	<15	
Thallium	50.0	53.0	106	50.0	53.0	106	<1	75-125	<15	
Vanadium	50.0	51.0	102	50.0	51.5	103	<1	75-125	<15	
Zinc	50.0	54.5	109	50.0	54.5	109	<1	75-125	<15	

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QUALITY CONTROL RESULTS

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-2; Dup or Spiked Sample: 89062.15; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	0.500	0.484	96.8	0.500	0.481	96.2	<1	50-150	<20
Aroclor-1260 (PCB-1260)	0.00	0.500	0.550	110	0.500	0.590	118	7.0	50-150	<20
Surrogates										
Decachlorobiphenyl	0.00	0.0500	0.0560	112	0.0500	0.0640	128	13.3	30-150	<20
Tetrachloro-m-xylene	0.00	0.0500	0.0590	118	0.0500	0.0660	132	11.2	30-150	<20

QC Batch No: 082217-2; Dup or Spiked Sample: 89062.15; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	0.500	0.455	91.0	0.500	0.356	71.2	24.4	50-150	<20	
Aroclor-1260 (PCB-1260)	0.500	0.500	100	0.500	0.535	107	6.8	50-150	<20	
Surrogates										
Decachlorobiphenyl	0.0500	0.0610	122	0.0500	0.0595	119	2.5	30-150	<20	
Tetrachloro-m-xylene	0.0500	0.0515	103	0.0500	0.0530	106	2.9	30-150	<20	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3; Dup or Spiked Sample: 89062.20; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	0.500	0.463	92.6	0.500	0.495	99.0	6.7	50-150	<20
Aroclor-1260 (PCB-1260)	0.00	0.500	0.550	110	0.500	0.620	124	12.0	50-150	<20
Surrogates										
Decachlorobiphenyl	0.00	0.0500	0.0580	116	0.0500	0.0590	118	1.7	30-150	<20
Tetrachloro-m-xylene	0.00	0.0500	0.0605	121	0.0500	0.0690	138	13.1	30-150	<20

QC Batch No: 082217-3; Dup or Spiked Sample: 89062.20; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	0.500	0.425	85.0	0.500	0.456	91.2	7.0	50-150	<20	
Aroclor-1260 (PCB-1260)	0.500	0.555	111	0.500	0.560	112	<1	50-150	<20	
Surrogates										
Decachlorobiphenyl	0.0500	0.0555	111	0.0500	0.0560	112	<1	30-150	<20	
Tetrachloro-m-xylene	0.0500	0.0520	104	0.0500	0.0530	106	1.9	30-150	<20	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 082217PB1; Dup or Spiked Sample: 89062.15; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Diesel (C13-C22)	0.00	500	548	110	500	497	99.4	10.1	75-125	<20
Surrogates										
Chlorobenzene	0.00	100	107	107	100	87.5	87.5	18.2	75-125	<20

QC Batch No: 082217PB1; Dup or Spiked Sample: 89062.15; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Diesel (C13-C22)	500	554	111	500	574	115	3.54	75-125	<20	
Surrogates										
Chlorobenzene	100	102	102	100	105	105	2.94	75-125	<20	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 082217PB2; Dup or Spiked Sample: 89064.16; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Diesel (C13-C22)	0.00	500	609	122	500	614	123	<1	75-125	<20
Surrogates										
Chlorobenzene	0.00	100	120	120	100	122	122	1.67	75-125	<20

QC Batch No: 082217PB2; Dup or Spiked Sample: 89064.16; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Diesel (C13-C22)	500	580	116	500	572	114	1.74	75-125	<20	
Surrogates										
Chlorobenzene	100	106	106	100	106	106	<1	75-125	<20	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 082217NB1; Dup or Spiked Sample: 89062.02AGA; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Gasoline and Light HC. (C4-C12)	0.00	1.00	0.634M	63.4	1.00	0.608M	60.8	4.2	75-125	<20
Surrogates										
Bromofluorobenzene	0.00	0.0500	0.0540	108	0.0500	0.0500	100	7.7	75-125	<20

QC Batch No: 082217NB1; Dup or Spiked Sample: 89062.02AGA; LCS: Clean Sand; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Gasoline and Light HC. (C4-C12)	1.00	0.925	92.5	1.00	0.893	89.3	3.5	75-125	<20	
Surrogates										
Bromofluorobenzene	0.0500	0.0488	97.6	0.0500	0.0515	103	5.4	75-125	<20	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 082217NB2; LCS: Clean Sand; LCS Prepared: 08/22/2017; LCS Analyzed: 08/22/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Gasoline and Light HC. (C4-C12)	1.00	0.830	82.9	1.00	0.910	90.8	9.10	75-125	<20	
Surrogates										
Bromofluorobenzene	0.0500	0.0481	96.2	0.0500	0.0523	105	9.15	75-125	<20	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C5; Dup or Spiked Sample: 89062.01; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Antimony	0.00	50.0	49.5	99.0	50.0	48.7	97.4	1.6	75-125	<15
Arsenic	0.00	50.0	49.4	98.8	50.0	49.7	99.4	<1	75-125	<15
Barium	88.8	50.0	128	78.4	50.0	129	80.4	2.5	75-125	<15
Beryllium	0.00	50.0	52.0	104	50.0	52.5	105	<1	75-125	<15
Cadmium	0.00	50.0	48.5	97.0	50.0	48.1	96.2	<1	75-125	<15
Chromium	9.64	50.0	59.0	98.7	50.0	58.3	97.3	1.4	75-125	<15
Cobalt	6.70	50.0	53.8	94.2	50.0	53.4	93.4	<1	75-125	<15
Copper	20.5	50.0	76.5	112	50.0	76.0	111	<1	75-125	<15
Lead	5.47	50.0	47.1	83.3	50.0	46.7	82.5	<1	75-125	<15
Mercury (By EPA 7471)	0.0110	0.500	0.432	84.2	0.500	0.406	79.0	6.4	75-125	<15
Molybdenum	0.00	50.0	50.5	101	50.0	50.0	100	<1	75-125	<15
Nickel	13.6	50.0	57.2	87.2	50.0	56.6	86.0	1.4	75-125	<15
Selenium	0.00	50.0	43.5	87.0	50.0	44.0	88.0	1.1	75-125	<15
Silver	0.00	50.0	48.0	96.0	50.0	48.1	96.2	<1	75-125	<15
Thallium	0.00	50.0	40.8	81.6	50.0	41.0	82.0	<1	75-125	<15
Vanadium	26.1	50.0	73.2	94.2	50.0	73.7	95.2	1.1	75-125	<15
Zinc	60.2	50.0	102	83.6	50.0	102	83.6	<1	75-125	<15

QC Batch No: 0822172C5; Dup or Spiked Sample: 89062.01; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Antimony	50.0	50.5	101	50.0	50.5	101	<1	75-125	<15	
Arsenic	50.0	51.0	102	50.0	50.5	101	<1	75-125	<15	
Barium	50.0	51.0	102	50.0	51.5	103	<1	75-125	<15	
Beryllium	50.0	56.0	112	50.0	55.5	111	<1	75-125	<15	
Cadmium	50.0	51.5	103	50.0	52.5	105	1.9	75-125	<15	
Chromium	50.0	49.7	99.4	50.0	52.0	104	4.5	75-125	<15	
Cobalt	50.0	51.0	102	50.0	52.0	104	1.9	75-125	<15	
Copper	50.0	51.0	102	50.0	51.5	103	<1	75-125	<15	
Lead	50.0	49.2	98.4	50.0	49.4	98.8	<1	75-125	<15	

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QUALITY CONTROL RESULTS

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C5; Dup or Spiked Sample: 89062.01; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Mercury (By EPA 7471)	0.500	0.560	112	0.500	0.560	112	<1	75-125	<15	
Molybdenum	50.0	49.8	99.6	50.0	50.0	100	<1	75-125	<15	
Nickel	50.0	49.6	99.2	50.0	50.0	100	<1	75-125	<15	
Selenium	50.0	52.0	104	50.0	51.5	103	<1	75-125	<15	
Silver	50.0	51.5	103	50.0	52.0	104	<1	75-125	<15	
Thallium	50.0	52.0	104	50.0	52.5	105	<1	75-125	<15	
Vanadium	50.0	50.5	101	50.0	51.0	102	<1	75-125	<15	
Zinc	50.0	52.5	105	50.0	53.0	106	<1	75-125	<15	

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Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C6; Dup or Spiked Sample: 89062.23; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Antimony	0.00	50.0	48.1	96.2	50.0	48.6	97.2	1.0	75-125	<15
Arsenic	0.00	50.0	49.0	98.0	50.0	49.0	98.0	<1	75-125	<15
Barium	78.4	50.0	108 #	59.2	50.0	109 #	61.2	3.3	75-125	<15
Beryllium	0.00	50.0	53.5	107	50.0	53.5	107	<1	75-125	<15
Cadmium	0.00	50.0	48.7	97.4	50.0	48.7	97.4	<1	75-125	<15
Chromium	0.00	50.0	57.0	114	50.0	57.0	114	<1	75-125	<15
Cobalt	0.00	50.0	53.0	106	50.0	52.5	105	<1	75-125	<15
Copper	11.4	50.0	62.9	103	50.0	63.9	105	1.9	75-125	<15
Lead	0.00	50.0	45.7	91.4	50.0	45.5	91.0	<1	75-125	<15
Mercury (By EPA 7471)	0.00300	0.500	0.463	92.0	0.500	0.446	88.6	3.8	75-125	<15
Molybdenum	0.00	50.0	49.5	99.0	50.0	49.3	98.6	<1	75-125	<15
Nickel	9.34	50.0	55.8	92.9	50.0	55.9	93.1	<1	75-125	<15
Selenium	0.00	50.0	43.3	86.6	50.0	44.3	88.6	2.3	75-125	<15
Silver	0.00	50.0	47.7	95.4	50.0	48.1	96.2	<1	75-125	<15
Thallium	0.00	50.0	43.0	86.0	50.0	43.0	86.0	<1	75-125	<15
Vanadium	50.1	50.0	93.4	86.6	50.0	94.5	88.8	2.5	75-125	<15
Zinc	25.5	50.0	74.6	98.2	50.0	74.9	98.8	<1	75-125	<15

QC Batch No: 0822172C6; Dup or Spiked Sample: 89062.23; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Antimony	50.0	51.5	103	50.0	51.0	102	<1	75-125	<15	
Arsenic	50.0	51.0	102	50.0	50.5	101	<1	75-125	<15	
Barium	50.0	51.5	103	50.0	51.0	102	<1	75-125	<15	
Beryllium	50.0	55.5	111	50.0	55.5	111	<1	75-125	<15	
Cadmium	50.0	52.0	104	50.0	51.5	103	<1	75-125	<15	
Chromium	50.0	52.5	105	50.0	50.0	100	4.9	75-125	<15	
Cobalt	50.0	52.0	104	50.0	51.0	102	1.9	75-125	<15	
Copper	50.0	51.5	103	50.0	51.0	102	<1	75-125	<15	
Lead	50.0	49.2	98.4	50.0	49.1	98.2	<1	75-125	<15	

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QUALITY CONTROL RESULTS

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (6010B/7000CAM), Title 22 Metals (SW-846)

QC Batch No: 0822172C6; Dup or Spiked Sample: 89062.23; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Mercury (By EPA 7471)	0.500	0.560	112	0.500	0.560	112	<1	75-125	<15	
Molybdenum	50.0	50.5	101	50.0	50.5	101	<1	75-125	<15	
Nickel	50.0	50.0	100	50.0	49.5	99.0	1.0	75-125	<15	
Selenium	50.0	52.5	105	50.0	52.0	104	<1	75-125	<15	
Silver	50.0	52.0	104	50.0	51.5	103	<1	75-125	<15	
Thallium	50.0	53.0	106	50.0	52.5	105	<1	75-125	<15	
Vanadium	50.0	51.5	103	50.0	51.0	102	<1	75-125	<15	
Zinc	50.0	54.5	109	50.0	52.5	105	3.7	75-125	<15	

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Attn: Christine Brendle
Page: **48**

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-2A; Dup or Spiked Sample: 89062.15; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	0.500	0.484	96.8	0.500	0.481	96.2	<1	50-150	<20
Aroclor-1260 (PCB-1260)	0.00	0.500	0.550	110	0.500	0.590	118	7.0	50-150	<20
Surrogates										
Decachlorobiphenyl	0.00	0.0500	0.0560	112	0.0500	0.0640	128	13.3	30-150	<20
Tetrachloro-m-xylene	0.00	0.0500	0.0590	118	0.0500	0.0660	132	11.2	30-150	<20

QC Batch No: 082217-2A; Dup or Spiked Sample: 89062.15; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/22/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	0.500	0.455	91.0	0.500	0.356	71.2	24.4	50-150	<20	
Aroclor-1260 (PCB-1260)	0.500	0.500	100	0.500	0.535	107	6.8	50-150	<20	
Surrogates										
Decachlorobiphenyl	0.0500	0.0610	122	0.0500	0.0595	119	2.5	30-150	<20	
Tetrachloro-m-xylene	0.0500	0.0515	103	0.0500	0.0530	106	2.9	30-150	<20	

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Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attn: Christine Brendle

Site

Irwindale Corporate Warehouse
13025 E. Los Angeles St.
Irwindale, CA 91706

Page: **49**

Project ID: IO# 337145
Project Name: Irwindale C.W. Pav. Alter.

AETL Job Number	Submitted	Client
89062	08/21/2017	SCE

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 082217-3A; Dup or Spiked Sample: 89062.20; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	0.500	0.463	92.6	0.500	0.495	99.0	6.7	50-150	<20
Aroclor-1260 (PCB-1260)	0.00	0.500	0.550	110	0.500	0.620	124	12.0	50-150	<20
Surrogates										
Decachlorobiphenyl	0.00	0.0500	0.0580	116	0.0500	0.0590	118	1.7	30-150	<20
Tetrachloro-m-xylene	0.00	0.0500	0.0605	121	0.0500	0.0690	138	13.1	30-150	<20

QC Batch No: 082217-3A; Dup or Spiked Sample: 89062.20; LCS: Blank; QC Prepared: 08/22/2017; QC Analyzed: 08/23/2017; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	0.500	0.425	85.0	0.500	0.456	91.2	7.0	50-150	<20	
Aroclor-1260 (PCB-1260)	0.500	0.555	111	0.500	0.560	112	<1	50-150	<20	
Surrogates										
Decachlorobiphenyl	0.0500	0.0555	111	0.0500	0.0560	112	<1	30-150	<20	
Tetrachloro-m-xylene	0.0500	0.0520	104	0.0500	0.0530	106	1.9	30-150	<20	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above PQL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

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Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Number of Pages	**8**
Date Received	**06/25/2018**
Date Reported	**06/25/2018**

Job Number	Order Date	Client
93076	06/25/2018	SCE

Project ID: IO# 337145
Project Name: Irwindale CW
Site: Irwindale, CA

Enclosed please find results of analyses of 6 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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CHAIN OF CUSTODY RECORD

106099

AETL JOB No. 93076

Page 1 of 1

COMPANY	SCE
PROJECT MANAGER	CHRISTINE BRENDLE
COMPANY ADDRESS	2244 WALNUT GROVE ROSEMEAD CA
PHONE / FAX	949-939-4966
PROJECT NAME	IRWINDALE CW
PROJECT #	337145
SITE NAME AND ADDRESS	IRWINDALE CW IRWINDALE CA
PO #	

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.
1	HA2	93076.01	6-25-18	1120	SOIL	1 4oz JAR	ICE
2	HA3	93076.02		1125			
3	HA4	93076.03		1130			
4	HA5	93076.04		1135			
5	HA6	93076.05		1140			
6	HA7	93076.06		1145			
7							
8							
9							
10							
11							
12							
13							
14							
15							

ANALYSIS REQUESTED: VOCs

TEST INSTRUCTIONS & COMMENTS

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	6	PROPERLY COOLED Y / N / NA	
CUSTODY SEALS Y / N / NA		SAMPLES INTACT Y / N / NA	
RECEIVED IN GOOD COND. Y / N		SAMPLES ACCEPTED Y / N	

TURN AROUND TIME

☐ NORMAL ☒ RUSH ☒ SAME DAY ☐ NEXT DAY ☐ 2 DAYS ☐ 3 DAYS

DATA DELIVERABLE REQUIRED

☐ HARD COPY
☐ PDF
☐ GEOTRACKER (GLOBAL ID) _____
☐ OTHER (PLEASE SPECIFY) _____

	1.	2.	3.
RELINQUISHED BY: SAMPLER	Signature:	Signature:	Signature:
	Printed Name: CHRISTINE BRENDLE	Printed Name:	Printed Name: Sargis.P
	Date: 6/25/18 Time: 1207	Date: Time:	Date: 6/25/18 Time: 1335
RECEIVED BY: / RECEIVED BY LABORATORY:	Signature:	Signature:	Signature:
	Printed Name: Sargis.P	Printed Name:	Printed Name:
	Date: 6/25/18 Time: 1207	Date: Time:	Date: 06/25/18 Time: 1335

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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COOLER RECEIPT FORM

Client Name: SCE
Project Name: IRWINDALE
AETL Job Number: 93076
Date Received: 06/25/10 Received by: Jean Claude
Carrier: ☒ AETL Courier ☐ Client ☐ GSO ☐ FedEx ☐ UPS
☐ Others:

Samples were received in: ☒ Cooler (1) ☐ Other (Specify):
Inside temperature of shipping container No 1: 2-5°C, No 2: _____, No 3: _____
Type of sample containers: ☐ VOA, ☐ Glass bottles, ☒ Wide mouth jars, ☐ HDPE bottles, ☐ Metal sleeves, ☐ Others (Specify): _____
How are samples preserved: ☐ None, ☒ Ice, ☐ Blue Ice, ☐ Dry Ice
☒ None, _ HNO_3, _ NaOH, _ ZnOAc, _ HCl, _ $Na_2S_2O_3$, _ MeOH
_ Other (Specify):

	Yes	No, explain below	Name, if client was notified.
1. Are the COCs Correct?	X		
2. Are the Sample labels legible?	X		
3. Do samples match the COC?	X		
4. Are the required analyses clear?	X		
5. Is there enough samples for required analysis?	X		
6. Are samples sealed with evidence tape?	NA		
7. Are sample containers in good condition?	X		
8. Are samples preserved?	X		
9. Are samples preserved properly for the intended analysis?	X		
10. Are the VOAs free of headspace?	NA		
11. Are the jars free of headspace?	J		

Explain all "No" answers for above questions:

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Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Telephone: (909)274-1646
Attention: Christine Brendle

Project ID: IO# 337145
Date Received 06/25/2018
Date Reported 06/25/2018

Job Number	Order Date	Client
93076	06/25/2018	SCE

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 6 samples with the following specification on 06/25/2018.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
93076.01	HA2	06/25/2018	Soil	1
93076.02	HA3	06/25/2018	Soil	1
93076.03	HA4	06/25/2018	Soil	1
93076.04	HA5	06/25/2018	Soil	1
93076.05	HA6	06/25/2018	Soil	1
93076.06	HA7	06/25/2018	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8260B) ^ SCE	06/25/2018	1	Rush	mg/Kg

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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ANALYTICAL RESULTS

Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Site

Irwindale, CA

Telephone: (909)274-1646
Attn: Christine Brendle
Page: **2**

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1

Our Lab I.D.			Method Blank	93076.01	93076.02	93076.03	93076.04
Client Sample I.D.				HA2	HA3	HA4	HA5
Date Sampled				06/25/2018	06/25/2018	06/25/2018	06/25/2018
Date Prepared			06/25/2018	06/25/2018	06/25/2018	06/25/2018	06/25/2018
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			06/25/2018	06/25/2018	06/25/2018	06/25/2018	06/25/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	0.025	0.025	ND	ND	ND	ND	ND
Benzene	0.001	0.001	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.005	0.005	ND	ND	ND	ND	ND
Bromochloromethane	0.005	0.005	ND	ND	ND	ND	ND
Bromodichloromethane	0.005	0.005	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	0.025	0.025	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	0.015	0.015	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.025	0.025	ND	ND	ND	ND	ND
n-Butylbenzene	0.005	0.005	ND	ND	ND	ND	ND
sec-Butylbenzene	0.005	0.005	ND	ND	ND	ND	ND
tert-Butylbenzene	0.005	0.005	ND	ND	ND	ND	ND
Carbon Disulfide	0.025	0.025	ND	ND	ND	ND	ND
Carbon tetrachloride	0.005	0.005	ND	ND	ND	ND	ND
Chlorobenzene	0.005	0.005	ND	ND	ND	ND	ND
Chloroethane	0.015	0.015	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	0.050	0.050	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.005	0.005	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	0.015	0.015	ND	ND	ND	ND	ND
2-Chlorotoluene	0.005	0.005	ND	ND	ND	ND	ND
4-Chlorotoluene	0.005	0.005	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	0.005	0.005	ND	ND	ND	ND	ND
Dibromochloromethane	0.005	0.005	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.005	0.005	ND	ND	ND	ND	ND
Dibromomethane	0.005	0.005	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.005	0.005	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.005	0.005	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.005	0.005	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.015	0.015	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1

Our Lab I.D.			Method Blank	93076.01	93076.02	93076.03	93076.04
Client Sample I.D.				HA2	HA3	HA4	HA5
Date Sampled				06/25/2018	06/25/2018	06/25/2018	06/25/2018
Date Prepared			06/25/2018	06/25/2018	06/25/2018	06/25/2018	06/25/2018
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			06/25/2018	06/25/2018	06/25/2018	06/25/2018	06/25/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1-Dichloroethane	0.005	0.005	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.005	0.005	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.005	0.005	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.005	0.005	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.005	0.005	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.005	0.005	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.005	0.005	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.005	0.005	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.005	0.005	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.005	0.005	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.005	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.001	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.015	0.015	ND	ND	ND	ND	ND
2-Hexanone	0.025	0.025	ND	ND	ND	ND	ND
Iodomethane	0.005	0.005	ND	ND	ND	ND	ND
Isopropylbenzene	0.005	0.005	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.005	0.005	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.025	0.025	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.002	0.002	ND	ND	ND	ND	ND
Methylene chloride (DCM)	0.025	0.025	ND	ND	ND	ND	ND
Naphthalene	0.005	0.005	ND	ND	ND	ND	ND
n-Propylbenzene	0.005	0.005	ND	ND	ND	ND	ND
Styrene	0.005	0.005	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.005	0.005	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.005	0.005	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.002	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.001	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.005	0.005	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.005	0.005	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.005	0.005	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.005	0.005	ND	ND	ND	ND	ND
Trichloroethene	0.0015	0.0015	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.005	0.005	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.001	0.001	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1

Our Lab I.D.			Method Blank	93076.01	93076.02	93076.03	93076.04
Client Sample I.D.				HA2	HA3	HA4	HA5
Date Sampled				06/25/2018	06/25/2018	06/25/2018	06/25/2018
Date Prepared			06/25/2018	06/25/2018	06/25/2018	06/25/2018	06/25/2018
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			06/25/2018	06/25/2018	06/25/2018	06/25/2018	06/25/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,2,4-Trimethylbenzene	0.005	0.005	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.005	0.005	ND	ND	ND	ND	ND
Vinyl Acetate	0.025	0.025	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.005	0.005	ND	ND	ND	ND	ND
o-Xylene	0.001	0.001	ND	ND	ND	ND	ND
m,p-Xylenes	0.001	0.001	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	93076.01	93076.02	93076.03	93076.04
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		102	116	104	105	106
Dibromofluoromethane	75-125		106	103	111	113	115
Toluene-d8	75-125		108	110	111	109	108

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ANALYTICAL RESULTS

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Telephone: (909)274-1646
Attn: Christine Brendle

Site

Irwindale, CA

Page: **5**

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1

Our Lab I.D.			93076.05	93076.06			
Client Sample I.D.			HA6	HA7			
Date Sampled			06/25/2018	06/25/2018			
Date Prepared			06/25/2018	06/25/2018			
Preparation Method			5030	5030			
Date Analyzed			06/25/2018	06/25/2018			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acetone	0.025	0.025	ND	ND			
Benzene	0.001	0.001	ND	ND			
Bromobenzene (Phenyl bromide)	0.005	0.005	ND	ND			
Bromochloromethane	0.005	0.005	ND	ND			
Bromodichloromethane	0.005	0.005	ND	ND			
Bromoform (Tribromomethane)	0.025	0.025	ND	ND			
Bromomethane (Methyl bromide)	0.015	0.015	ND	ND			
2-Butanone (MEK)	0.025	0.025	ND	ND			
n-Butylbenzene	0.005	0.005	ND	ND			
sec-Butylbenzene	0.005	0.005	ND	ND			
tert-Butylbenzene	0.005	0.005	ND	ND			
Carbon Disulfide	0.025	0.025	ND	ND			
Carbon tetrachloride	0.005	0.005	ND	ND			
Chlorobenzene	0.005	0.005	ND	ND			
Chloroethane	0.015	0.015	ND	ND			
2-Chloroethyl vinyl ether	0.050	0.050	ND	ND			
Chloroform (Trichloromethane)	0.005	0.005	ND	ND			
Chloromethane (Methyl chloride)	0.015	0.015	ND	ND			
2-Chlorotoluene	0.005	0.005	ND	ND			
4-Chlorotoluene	0.005	0.005	ND	ND			
1,2-Dibromo-3-chloropropane (DBCP)	0.005	0.005	ND	ND			
Dibromochloromethane	0.005	0.005	ND	ND			
1,2-Dibromoethane (EDB)	0.005	0.005	ND	ND			
Dibromomethane	0.005	0.005	ND	ND			
1,2-Dichlorobenzene	0.005	0.005	ND	ND			
1,3-Dichlorobenzene	0.005	0.005	ND	ND			
1,4-Dichlorobenzene	0.005	0.005	ND	ND			
Dichlorodifluoromethane	0.015	0.015	ND	ND			

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ANALYTICAL RESULTS

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1

Our Lab I.D.			93076.05	93076.06			
Client Sample I.D.			HA6	HA7			
Date Sampled			06/25/2018	06/25/2018			
Date Prepared			06/25/2018	06/25/2018			
Preparation Method			5030	5030			
Date Analyzed			06/25/2018	06/25/2018			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
1,1-Dichloroethane	0.005	0.005	ND	ND			
1,2-Dichloroethane (EDC)	0.005	0.005	ND	ND			
1,1-Dichloroethene	0.005	0.005	ND	ND			
cis-1,2-Dichloroethene	0.005	0.005	ND	ND			
trans-1,2-Dichloroethene	0.005	0.005	ND	ND			
1,2-Dichloropropane	0.005	0.005	ND	ND			
1,3-Dichloropropane	0.005	0.005	ND	ND			
2,2-Dichloropropane	0.005	0.005	ND	ND			
1,1-Dichloropropene	0.005	0.005	ND	ND			
cis-1,3-Dichloropropene	0.005	0.005	ND	ND			
trans-1,3-Dichloropropene	0.005	0.005	ND	ND			
Ethylbenzene	0.001	0.001	ND	ND			
Hexachlorobutadiene	0.015	0.015	ND	ND			
2-Hexanone	0.025	0.025	ND	ND			
Iodomethane	0.005	0.005	ND	ND			
Isopropylbenzene	0.005	0.005	ND	ND			
p-Isopropyltoluene	0.005	0.005	ND	ND			
4-Methyl-2-pentanone (MIBK)	0.025	0.025	ND	ND			
Methyl-tert-butyl ether (MTBE)	0.002	0.002	ND	ND			
Methylene chloride (DCM)	0.025	0.025	ND	ND			
Naphthalene	0.005	0.005	ND	ND			
n-Propylbenzene	0.005	0.005	ND	ND			
Styrene	0.005	0.005	ND	ND			
1,1,1,2-Tetrachloroethane	0.005	0.005	ND	ND			
1,1,2,2-Tetrachloroethane	0.005	0.005	ND	ND			
Tetrachloroethene	0.002	0.002	ND	ND			
Toluene (Methyl benzene)	0.001	0.001	ND	ND			
1,2,3-Trichlorobenzene	0.005	0.005	ND	ND			
1,2,4-Trichlorobenzene	0.005	0.005	ND	ND			
1,1,1-Trichloroethane	0.005	0.005	ND	ND			
1,1,2-Trichloroethane	0.005	0.005	ND	ND			
Trichloroethene	0.0015	0.0015	ND	ND			
Trichlorofluoromethane	0.005	0.005	ND	ND			
1,2,3-Trichloropropane	0.001	0.001	ND	ND			

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ANALYTICAL RESULTS

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1

Our Lab I.D.			**93076.05**	**93076.06**			
Client Sample I.D.			HA6	HA7			
Date Sampled			06/25/2018	06/25/2018			
Date Prepared			06/25/2018	06/25/2018			
Preparation Method			5030	5030			
Date Analyzed			06/25/2018	06/25/2018			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
1,2,4-Trimethylbenzene	0.005	0.005	ND	ND			
1,3,5-Trimethylbenzene	0.005	0.005	ND	ND			
Vinyl Acetate	0.025	0.025	ND	ND			
Vinyl chloride (Chloroethene)	0.005	0.005	ND	ND			
o-Xylene	0.001	0.001	ND	ND			
m,p-Xylenes	0.001	0.001	ND	ND			
Our Lab I.D.			**93076.05**	**93076.06**			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
Bromofluorobenzene	75-125		106	105			
Dibromofluoromethane	75-125		118	114			
Toluene-d8	75-125		108	108			

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QUALITY CONTROL RESULTS

Ordered By

Southern California Edison Company
1 Innovation Way
Pomona, CA 91768-

Site

Irwindale, CA

Telephone: (909)274-1646
Attn: Christine Brendle
Page: **8**

Project ID: IO# 337145
Project Name: Irwindale CW

AETL Job Number	Submitted	Client
93076	06/25/2018	SCE

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0625182A1; LCS: Clean Sand; LCS Prepared: 06/25/2018; LCS Analyzed: 06/25/2018; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Benzene	0.0500	0.0491	98.2	0.0500	0.0480	96.0	2.27	75-125	<20	
Carbon tetrachloride	0.0500	0.0560	112	0.0500	0.0550	110	1.80	75-125	<20	
Chlorobenzene	0.0500	0.0545	109	0.0500	0.0525	105	3.74	75-125	<20	
Chloroform (Trichloromethane)	0.0500	0.0480	96.0	0.0500	0.0480	96.0	<1	75-125	<20	
1,2-Dichlorobenzene	0.0500	0.0525	105	0.0500	0.0515	103	1.92	75-125	<20	
1,1-Dichloroethane	0.0500	0.0453	90.6	0.0500	0.0435	87.0	4.05	75-125	<20	
1,1-Dichloroethene	0.0500	0.0535	107	0.0500	0.0510	102	4.78	75-125	<20	
cis-1,2-Dichloroethene	0.0500	0.0555	111	0.0500	0.0540	108	2.74	75-125	<20	
Ethylbenzene	0.0500	0.0515	103	0.0500	0.0500	100	2.96	75-125	<20	
Methyl-tert-butyl ether (MTBE)	0.0500	0.0510	102	0.0500	0.0495	99.0	2.99	75-125	<20	
n-Propylbenzene	0.0500	0.0545	109	0.0500	0.0545	109	<1	75-125	<20	
Toluene (Methyl benzene)	0.0500	0.0520	104	0.0500	0.0510	102	1.94	75-125	<20	
1,1,1-Trichloroethane	0.0500	0.0535	107	0.0500	0.0515	103	3.81	75-125	<20	
1,1,2-Trichloroethane	0.0500	0.0474	94.8	0.0500	0.0465	93.0	1.92	75-125	<20	
Trichloroethene	0.0500	0.0555	111	0.0500	0.0535	107	3.67	75-125	<20	
1,2,4-Trimethylbenzene	0.0500	0.0540	108	0.0500	0.0520	104	3.77	75-125	<20	
1,3,5-Trimethylbenzene	0.0500	0.0535	107	0.0500	0.0515	103	3.81	75-125	<20	
o-Xylene	0.0500	0.0515	103	0.0500	0.0490	98.0	4.98	75-125	<20	
m,p-Xylenes	0.100	0.107	107	0.100	0.102	102	4.78	75-125	<20	
Surrogates										
Bromofluorobenzene	0.0500	0.0505	101	0.0500	0.0520	104	2.97	75-125	<20	
Dibromofluoromethane	0.0500	0.0482	96.3	0.0500	0.0460	92.0	4.47	75-125	<20	
Toluene-d8	0.0500	0.0505	101	0.0500	0.0510	102	<1	75-125	<20	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above PQL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

AGENT SPECIAL WASTE SERVICE AGREEMENT
NON-HAZARDOUS WASTES

REPUBLIC SERVICES

Special Waste Profile Number: **5123 18 10622**

Agent Billing Information		Republic Waste Location (Company)
Name:	MISSION PAVING & SEALING (ACCT# 333393	SUNSHINE CANYON LANDFILL (5123)
Address:	12747 SCHABARUM AVE	14747 SAN FERNANDO ROAD
City:	IRWINDALE	SYLMAR, CA 91342
State:	CALIFORNIA Zip: 91706	818.833.6500
Phone:	626.452.8200 Fax:	
Contact:	PHIL DRESDEN	

Project: SOUTHERN CALIFORNIA EDISON – IRWINDALE CORP WAREHOUSE **County and State of Origin:** LOS ANGELES, CALIFORNIA

Generator Address: 13025 E LOS ANGELES ST, IRWINDALE CA 91706

Additional Information: CONTACT: RYAN CASTILLO | PHONE: 626 656.0453

1. Special Waste Service. Subject to the terms and conditions contained herein, the Company and the Agent agree to be legally bound hereby and the Company agrees to accept at its Facility, Acceptable Waste (hereinafter referred to as "Special Waste" or "Waste") delivered by Agent, and which is acceptable to the Company as herein provided.

2. Acceptable Waste. Only those Special Wastes described in Paragraph 3 herein and in any Special Waste Profile(s) which number is identical to the contract number referenced above, and which Profile(s) are hereby incorporated by reference herein, and which Waste is subsequently approved by the Company and is otherwise in accordance with all laws, regulations and permits, shall be acceptable for disposal at the Facility ("Acceptable Waste").

3 **(A)** Rates for Disposal:

Waste	Disposal Method	Disposal Rate:	Fees / Taxes / Misc.	Transportation
NON HAZ SOIL	LANDFILL	$43.99 PER TON WITH A MINIMUM OF $300 PER LOAD	ERF & FRF WAIVED	N/A

Additional Information: ENVIRONMENTAL RECOVERY FEE (ERF) $16.25 PER LOAD | FUEL RECOVERY FEE (FRF) 6-10% | INVOICE FEE $5.95 PER INVOICE AND LATE FEES | A completed / signed manifest is required for each profiled approved load received at Sunshine Landfill

PROFILE EXPIRES: 8/23/18 | MATERIAL CODE: VG-SW-CONT SOIL | EAV: 800 CUBIC YARDS

Agent shall also be liable for all taxes, fees, or other charges imposed by federal, state, local or provincial laws and regulations.

Cannot Exceed Daily Volume of 800 CUBIC YARDS Without Prior Approval of Company.

(B) Incorporation by Reference. In addition to Special Waste Profile(s), the following documents are incorporated by reference into this Agreement as if fully set forth herein.

1) N/A

2) N/A

4. Term of Agreement. This Agreement is effective for **12** months, commencing **6/28/2018** and shall automatically be renewed for a similar term thereafter unless either party shall give written notice (via certified mail) of termination to the other party at least thirty (30) days prior written notice.

THE COMPANY AND THE AGENT, IN CONSIDERATION OF THE MUTUAL OBLIGATIONS CONTAINED HEREIN, AGREE THAT THIS IS A LEGALLY BINDING AGREEMENT WHICH IS SUBJECT TO THE TERMS AND CONDITIONS SET FORTH ON THIS PAGE AND ON THE REVERSE SIDE OF THIS DOCUMENT. IN ADDITION, THE GENERATOR IS CERTIFYING THE ATTACHED TERMS AND CONDITIONS HAVE BEEN REVIEWED AND INITIALLED AT THE BOTTOM OF THE PAGE.

MISSION PAVING AND SEALING, INC./AGENT

SIGNATURE (AUTHORIZED REPRESENTATIVE)

Doug Sweeney

NAME AND TITLE (PLEASE PRINT)

President

DATE

REPUBLIC SERVICES, INC/COMPANY

for Ed Antolin

SIGNATURE (AUTHORIZED REPRESENTATIVE)

Mike Riley, Director

NAME AND TITLE (PLEASE PRINT)

6-29-18

DATE

Terms and Conditions of Agent Special Waste Service Agreement

5 The Agreement This agreement of the parties ("Agreement") for the disposal of Special Waste shall consist of this Agreement, riders to the Agreement (if any) and any Application, permit and approval that may be applicable to such Waste

6 Waste Accepted at Facility Agent represents, warrants and covenants that the Waste delivered to Company at its Facility hereunder will be Acceptable Waste and will not contain any unacceptable quantity of hazardous materials or substances, radioactive materials or substances, or toxic waste or substances, as defined by applicable federal, state, local or provincial laws or regulations. Any Waste which does not meet these requirements shall hereinafter be referred to as "Unacceptable Waste". The Agent shall in all matters relating to the collection, transportation and disposal of the Waste hereunder, comply with all applicable federal, state and local laws, regulations, rules and orders regarding the same. The word "Facility" shall mean any landfill, transfer station or other location used to transfer, process or otherwise dispose of such Waste

7 Special Waste Agent represents, warrants and covenants that the Waste delivered to Company hereunder (i) will not contain any Special Waste that is not specifically described on any Application which is attached hereto and which is subsequently approved by the Company, (ii) will meet the material description as set forth in any Application and otherwise in all significant respects and (iii) will not contain Unacceptable Waste. The parties may incorporate additional Special Waste as part of this Agreement if prior to delivery of such Waste to Company, Agent has provided an Application for such Waste and Company has approved disposal of such Waste within the limitations and conditions contained in Company's written notice of approval of Special Waste. Title to any and all Waste handled or disposed of by Company shall at all times remain with Generator and Agent

8 Rights of Refusal/Rejection The Agent shall inspect all Waste at the place(s) of collection and shall remove any and all Unacceptable Waste. Company has the right to refuse, or to reject after acceptance, any load(s) of Waste(s) delivered to its Facility including if the Company believes the Agent has breached (or is breaching) its representations, warranties, covenants or agreements hereunder, or any applicable federal, state or local laws, regulations, rules or orders, even if only a portion of such Waste load is unacceptable. The Company shall have the right to inspect all vehicles of Waste haulers, including the Agent's vehicles, in order to determine whether the Waste is Acceptable Waste or Unacceptable Waste pursuant to this Agreement and all applicable federal, state and local laws, rules and regulations. The Company's exercise, or failure to exercise, its rights hereunder shall not operate to relieve the Agent of its responsibilities or liability under this Agreement. The Agent shall be responsible for, and bear all reasonable expenses and damages incurred by the Company, as a result of the Unacceptable Waste and in the reloading and removal of Unacceptable Waste disposed in the Facility. The Company, may also, in its sole discretion, require the Agent to promptly remove the Unacceptable Waste

9 Limited License to Enter This Agreement provides Agent with a license to enter the Facility for the limited purpose of, and only to the extent necessary for, off-loading Acceptable Waste at the Facility in the manner directed by Company. Except in an emergency, Agent's personnel shall not leave the immediate vicinity of their vehicle. After off-loading the Waste, Agent's personnel shall promptly leave the Facility. Under no circumstances shall Agent or its personnel engage in any scavenging of Waste or other materials at the Facility. The Company reserves the right to make and enforce reasonable rules and regulations concerning the operation of the Facility, the conduct of the drivers and others on the Facility premises, quantities and sources of Waste, and any other matters necessary or desirable for the safe, legal and efficient operation of the Facility including, but not limited to, speed limits on haul roads imposed by the Company, and the wearing of hard hats and other personal protection equipment by all individuals allowed on the Facility premises. Agent agrees to conform to such rules and regulations as they may be established and amended from time to time. Company may refuse to accept Waste from and shall deny an entrance license to, any of Agent's personnel whom Company believes is under the influence of alcohol or other chemical substances. Agent shall be solely responsible for its employees and subcontractors performing their obligations in a safe manner when at the facility of Company

10 Charges and Payment Payment shall be made by Agent within sixty (60) days after receipt of invoice from Company. In the event that any amount is overdue, the Company may terminate this Agreement. Agent agrees to pay a finance charge equal to the maximum interest rate permitted by law. Agent shall be liable for all taxes, fees, or other charges imposed upon the disposal of the Waste by federal, state, local or provincial laws and regulations. Company, from time to time, may modify its rates upon sixty (60) days written notice to Agent. Agent hereby agrees that the Company's right to receive payments under this Agreement is unconditional and is not conditioned upon Agent first receiving payment from Generator or any other party

11 Termination Agent's obligations, representations, warranties and covenants regarding the Waste delivered and all indemnities shall survive termination of this Agreement. Should Agent materially default in any of its obligations hereunder, then Company may immediately terminate this Agreement and Agent shall be liable for all costs and damages incurred by the Company

12 Driver's Knowledge and Authority Agent represents, warrants and covenants that its drivers who deliver Waste to Company's Facility have been advised by Agent of the Company's prohibition on deliveries of hazardous materials or substances, radioactive materials or substances, or toxic waste or substances or any other Unacceptable Waste to the Facility, of Company's restrictions on deliveries of Special Waste to the Facility of the definitions of "Hazardous Waste and Hazardous Substances" as provided by applicable federal, state and local law, rules and regulations and "Special Waste" as provided herein, and of the terms of this license to enter Company's Facility

13 Indemnification Agent shall indemnify, defend and hold harmless the Company and its subsidiaries, affiliates and parent corporations, as applicable and their respective officers, directors, lenders, employees, subcontractors and agents from and against any and all claims, suits, losses, liabilities, assessments, damages, fines, costs and expenses, including reasonable attorneys fees arising under federal, state or local laws, regulations or ordinances, or relating to the content of the Waste, or arising out of or in connection with any breach of this Agreement or arising out of the negligent collection, transportation and disposal of Waste by Agent or Agent's employees, agents, subcontractors or representatives thereof. Agent shall also be responsible for increased inspection, testing, study and analysis costs made necessary due to reasonable concerns of the Company as to the content of the Waste following discovery of potentially Unacceptable Waste. This indemnification and other obligations stated in this paragraph shall survive the termination of this Agreement

14 Insurance Agent shall maintain in full force and effect throughout the term of this Agreement the following types of insurance in at least the amounts specified below

Coverages	Minimum Amounts of Insurance
Worker's Compensation	Statutory
General Liability	$500,000 combined single limit
Automobile Liability	$500,000 combined single limit

All insurance will be by insurers authorized to do business in the state in which the Facility is located. Prior to Agent being allowed on Facility premises, Agent shall provide the Company with certificates of insurance or other satisfactory evidence that such insurance has been procured and is in force. Said policies shall not thereafter be canceled, be permitted to expire, or be changed without thirty (30) days advance written notice to the Company. Agent warrants that it will secure the above minimum amounts of insurance from any transportation of the Waste to the Facility

15 Failure to Perform Neither party hereto shall be liable for its failure to perform hereunder due to circumstances not its fault and beyond its reasonable control, including, but not limited to, strikes or other labor disputes, riots, protests, civil disturbances or sabotage, changes in law, fires, floods, compliance with government requests, explosions, accidents, weather, lack of required natural resources, or acts of God affecting either party hereto. In the event of any of the circumstances provided for in the preceding sentence, including, but not limited, to whether any federal, state or local court or governmental authority takes any action which would (i) close or restrict operations at the Facility, (ii) limit the quantity or prohibit the disposal of Waste at the Facility, or (iii) limit the ability of or prohibit Agent from delivering Waste to the Facility, the Company shall have the right, at its option, to reduce, suspend or terminate Agent's access to the Facility immediately, without prior notice and without any additional liabilities between the parties, other than Agent's payment obligation hereunder. Neither Party is required hereunder to settle any labor dispute against its own best judgment

16 Other Termination The occurrence of any of the following events shall also constitute an event of default by the Agent and shall give the Company the right to immediately terminate this Agreement

(A) A petition for reorganization or bankruptcy filed by or against the Agent

(B) Failure by Agent to pay any amounts due to Company

(C) Any breach by Agent of any of its obligations pursuant to the Agreement

Agent shall be liable for and shall indemnify, defend and hold harmless Company from any losses, claims expenses or damages incurred by the Company as a result of termination hereunder

17 Assignment Agent may not assign, transfer or otherwise vest in any other Company, entity or person, in whole or in part, any of its rights or obligations under the Agreement without the prior written consent of the Company, provided, however, that the Company may without any such prior written consent, assign its rights and/or obligations under the Agreement to a subsidiary or affiliate corporation

18 Right of Disposal This Agreement does not grant any rights to dispose of Waste other than in accordance herewith. The Company reserves the right to immediately terminate access to the Facility by Agent and Agent's personnel in the event of breach or violation by Agent of any of the terms of this Agreement, the Company's operating rules or payment policies or any applicable laws or regulations

19 Continuing Compliance The Agent has a continuing obligation to inform the Company of any new information, or information not previously provided to the Company by Agent and/or Generator which may affect the acceptability of the Waste by the Company. Further, the Agent shall comply with all Company requests for evidence of Agent's continuing compliance with the terms of the Agreement including but not limited to the following: (i) providing new, updated Waste profiles on the Waste(s) offered for disposal or, (ii) providing appropriate certification that the Waste being offered for disposal is accurately reflected by the appropriate Application or, (iii) re-sample the Waste at Agent's expense if reasonable cause exists as to its acceptability under the terms of this Agreement or, (iv) allow the Company to re-sample the Waste at Agent's expense if reasonable cause exists as to its acceptability under the terms of this Agreement or (v) all of the above

20 Miscellaneous

(A) This Agreement shall be governed by the laws of the State in which the Facility is located

(B) No waiver of a breach of any of the obligations contained in the Agreement shall be construed to be a waiver of any prior or succeeding breach of the same obligation or of any other obligation of this Agreement

(C) No modification, release, discharge or waiver of any provision or obligation hereof shall be of any force, or effect, unless in writing signed by all parties to this Agreement

(D) Agent shall treat as confidential and not disclose to others during or subsequent to the terms of this Agreement, except as is necessary to perform this Agreement, or to comply with any applicable law or regulation any information (including any technical information, experience or date) regarding the Company's plans, programs, plants, processes, products, costs, equipment or operations which may come within the knowledge of the Agent or its employees in the performance of this Agreement, without in each instance securing the prior written consent of the other Company

(E) If any term, phrase, obligation or provision of this Agreement shall be held to be invalid, illegal or unenforceable in any respect, this Agreement shall remain in effect and be construed without regard to such term, phrase, obligation or provision

(F) This Agreement constitutes the entire understanding between the parties, replacing and amending any prior agreements between the parties, and shall be binding upon all parties hereto, their successors, heirs, representatives and assigns. Any provision, term or condition in any acknowledgement, purchase order or other response by Agent which is in addition to or different from the provisions of this Agreement shall be deemed objected to by the Company and shall be of no effect

(G) Agent represents, warrants and covenants that it is and during the term of this Agreement, will remain, in compliance with and will perform its obligations pursuant to all applicable laws and regulations and shall indemnify, defend and hold harmless the Company from any breach thereof

(H) It is the understanding and agreement of the parties that the Company is an independent contractor, and is not an agent, nor an authorized representative of the Agent. It is the further understanding and agreement of the parties that Agent is an authorized representative of Generator.

21 Notices All notices herein provided for shall be considered as having been given upon being placed in the mail, certified postage prepaid addressed to the Company or Agent at the address herein set forth in this Agreement or to such other address as may be given to the other party in writing

22 Liquidated Damages In the event that this Agreement is terminated by the Agent in a manner not in accordance with paragraph 4 hereof, or terminated due to a breach of this Agreement by the Agent, the Agent shall pay, as liquidated damages, and not as a penalty, the greater of an amount equal to six (6) months' service charges or the Agent's most recent monthly charge multiplied by six (6). The Agent shall be given credit for any advance payments made hereunder, however, in computing the amount owed as liquidated damages hereunder. The Agent acknowledges that this liquidated damages clause is reasonable and is applicable to recover damages related to its investment in equipment, development of landfills and hiring of employees undertaken by the Company to service its customers including the Agent. This liquidated damages clause in no way relieves the Agent from its obligations and liability for other cost or damages as set forth elsewhere in this Agreement.

AGENT: _____ Republic Services, INC./COMPANY: _____

REPUBLIC SERVICES, INC.

Republic Services, Inc.

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	5123189975	6/18/2019	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 5123 - Sunshine Canyon Landfill

Generator Name: NORTHROP GRUMMAN AEROSPACE SYSTEMS

Generator Site Address: 3301 AVIATION BLVD

City: MANHATTAN BEACH	County:	State: CA	Zip:

Name of Waste: D1 EXCAVATED SOIL WITH TRACE DIESEL RANGE ORGANICS

Estimated Annual Volume: 100 Tons

II. Special Waste Department Decision: ☑ Approved ☐ Rejected

Management Method(s): ☑ Landfill ☐ Solidification ☐ Bioremediation ☐ Transfer Facility

Problematic Special Waste according to Republic? ☐ Yes ☑ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☑ Not Applicable

Precautions, Conditions or Limitations on Approval

Special Waste Analyst Signature: _____ **Name (Printed):** Suzanne Glass

Date: 6/18/2018

III. Facility Decision: ☑ Approved ☐ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** Chris Cayle

Date: 6/18/2018

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: 5123 Sunshine Canyon LF CA

Waste Profile #
5123 18 9975
Sales Rep #: 585

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed

I. Generator Information

Generator Name: Northrop Grumman Aerospace Systems			
Generator Site Address: 3301 Aviation Blvd.			
City: Manhattan Beach	County: Los Angeles	State: California	Zip: 90266
State ID/Reg No: CAD009324	State Approval/Waste Code: (if applicable)		NAICS # : 334412
Generator Mailing Address (if different): ☐ 3301 Aviation Blvd.			
City: Manhattan Beach	County:	State: California	Zip: 90266
Generator Contact Name: Arlen Fuhrman		Email: arlen.fuhrman@ngc.com	
Phone Number: (310) 813-5994	Ext:	Fax Number:	

II. Billing Information

Bill To: Republic Services Gardena		Contact Name:	
Billing Address: 14905 S San Pedro St.		Email:	
City: Gardena	State: CA	Zip: 90247	Phone: (888) 742-5234

III. Waste Stream Information

Name of Waste: D1 Excavated Soil with Trace Diesel Range Organics	
Process Generating Waste: Ground excavation at building D1	
Type of Waste:	☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	100 Tons
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification ☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☑ COMPOSITE SAMPLE ☐ GRAB SAMPLE	
Sample Date: 5/24/18	
Sample ID Numbers: 01-D1-CT	

Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Soil	99 - 100
2. Diesel Range Organics	0 - 1
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
BrowN	Mild	☐ YES or ☑ NO	100	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Arlen Fuhrman, Hazardous Waste Manager	Northrop Grumman Aerospace Systems
Authorized Representative Name And Title (Type or Print)	Company Name
Authorized Representative Signature	6/14/18
	Date

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WORK ORDER NUMBER: 18-05-2282

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Northrop Grumman Systems Corporation

Client Project Name: Space Park

Attention: Doug Hill
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Approved for release on 05/31/2018 by:
Carla Hollowell
Project Manager

ResultLink ▸

Email your PM ▸

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Contents

Client Project Name: Space Park
Work Order Number: 18-05-2282

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Work Order Narrative

Work Order: 18-05-2282 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/25/18. They were assigned to Work Order 18-05-2282.

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.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

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Sample Summary

Client:	Northrop Grumman Systems Corporation	Work Order:	18-05-2282
	8710 Freeport Parkway, Suite 200	Project Name:	Space Park
	Irving, TX 75063-2577	PO Number:	
		Date/Time Received:	05/25/18 13:52
		Number of Containers:	1
Attn:	Doug Hill		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
01-D1-CT	18-05-2282-1	05/24/18 15:20	1	Solid

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Detections Summary

Client:	Northrop Grumman Systems Corporation	Work Order:	18-05-2282
	8710 Freeport Parkway, Suite 200	Project Name:	Space Park
	Irving, TX 75063-2577	Received:	05/25/18
Attn:	Doug Hill		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
01-D1-CT (18-05-2282-1)						
Antimony	0.151	J	0.149*	mg/kg	EPA 6010B	EPA 3050B
Arsenic	1.01		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	34.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.154	J	0.137*	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.186	J	0.135*	mg/kg	EPA 6010B	EPA 3050B
Chromium	5.44		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	2.66		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	5.53		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	3.80	B	0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.499		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.53		0.250	mg/kg	EPA 6010B	EPA 3050B
Selenium	0.957		0.750	mg/kg	EPA 6010B	EPA 3050B
Vanadium	10.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	19.6		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0360	J	0.00597*	mg/kg	EPA 7471A	EPA 7471A Total
Diesel Range Organics	4.3	HD,J	1.3*	mg/kg	EPA 8015B	EPA 3550B
Dimethyl Phthalate	0.36	J	0.11*	mg/kg	EPA 8270C	EPA 3545

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3550B
Method: EPA 8015B
Units: mg/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**GC 50**	**05/29/18**	**05/29/18 17:09**	**180529B08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Diesel Range Organics	4.3	5.0	1.3	1.00	HD,J

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	42-162	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-414-1101**	**N/A**	**Solid**	**GC 50**	**05/29/18**	**05/29/18 14:30**	**180529B08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Diesel Range Organics	ND	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	42-162	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8015B
Units: mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**GC 57**	**05/25/18**	**05/26/18 00:18**	**180525L054**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Gasoline Range Organics	ND	0.51	0.092	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	70	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-024-1205**	**N/A**	**Solid**	**GC 57**	**05/25/18**	**05/25/18 13:41**	**180525L054**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Gasoline Range Organics	ND	0.50	0.091	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	68	42-126	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3050B
Method: EPA 6010B
Units: mg/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**ICP 7300**	**05/30/18**	**05/30/18 16:29**	**180530L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Antimony	0.151	0.750	0.149	1.00	J
Arsenic	1.01	0.750	0.259	1.00	
Barium	34.4	0.500	0.154	1.00	
Beryllium	0.154	0.250	0.137	1.00	J
Cadmium	0.186	0.500	0.135	1.00	J
Chromium	5.44	0.250	0.142	1.00	
Cobalt	2.66	0.250	0.148	1.00	
Copper	5.53	0.500	0.135	1.00	
Lead	3.80	0.500	0.132	1.00	B
Molybdenum	0.499	0.250	0.132	1.00	
Nickel	3.53	0.250	0.145	1.00	
Selenium	0.957	0.750	0.300	1.00	
Silver	ND	0.250	0.0857	1.00	
Thallium	ND	0.750	0.152	1.00	
Vanadium	10.2	0.250	0.141	1.00	
Zinc	19.6	1.00	0.178	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3050B
Method: EPA 6010B
Units: mg/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-26376**	**N/A**	**Solid**	**ICP 7300**	**05/30/18**	**05/30/18 16:51**	**180530L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Antimony	ND	0.725	0.144	0.966	
Arsenic	ND	0.725	0.250	0.966	
Barium	ND	0.483	0.149	0.966	
Beryllium	ND	0.242	0.132	0.966	
Cadmium	ND	0.483	0.131	0.966	
Chromium	ND	0.242	0.137	0.966	
Cobalt	ND	0.242	0.143	0.966	
Copper	ND	0.483	0.130	0.966	
Lead	0.149	0.483	0.127	0.966	J
Molybdenum	ND	0.242	0.128	0.966	
Nickel	ND	0.242	0.140	0.966	
Selenium	ND	0.725	0.289	0.966	
Silver	ND	0.242	0.0828	0.966	
Thallium	ND	0.725	0.147	0.966	
Vanadium	ND	0.242	0.136	0.966	
Zinc	ND	0.966	0.172	0.966	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**Mercury 08**	**05/29/18**	**05/30/18 14:25**	**180529L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0360	0.0847	0.00597	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-3858**	**N/A**	**Solid**	**Mercury 08**	**05/29/18**	**05/29/18 14:36**	**180529L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0833	0.00587	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8082
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**GC 31**	**05/29/18**	**05/30/18 13:29**	**180529L13**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	49	20	1.00	
Aroclor-1221	ND	49	41	1.00	
Aroclor-1232	ND	49	25	1.00	
Aroclor-1242	ND	49	36	1.00	
Aroclor-1248	ND	49	31	1.00	
Aroclor-1254	ND	49	31	1.00	
Aroclor-1260	ND	49	30	1.00	
Aroclor-1262	ND	49	34	1.00	
Aroclor-1268	ND	49	33	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	106	25-145	

Method Blank	099-12-535-4682	N/A	Solid	GC 31	05/29/18	05/30/18 12:13	180529L13

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	50	21	1.00	
Aroclor-1221	ND	50	42	1.00	
Aroclor-1232	ND	50	25	1.00	
Aroclor-1242	ND	50	37	1.00	
Aroclor-1248	ND	50	32	1.00	
Aroclor-1254	ND	50	32	1.00	
Aroclor-1260	ND	50	30	1.00	
Aroclor-1262	ND	50	35	1.00	
Aroclor-1268	ND	50	33	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	102	25-145	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**GC/MS CCC**	**05/29/18**	**05/30/18 16:49**	**180529L11**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acenaphthene	ND	0.49	0.062	1.00	
Acenaphthylene	ND	0.49	0.058	1.00	
Aniline	ND	0.49	0.058	1.00	
Anthracene	ND	0.49	0.062	1.00	
Azobenzene	ND	0.49	0.053	1.00	
Benzidine	ND	9.8	0.80	1.00	
Benzo (a) Anthracene	ND	0.49	0.055	1.00	
Benzo (a) Pyrene	ND	0.49	0.053	1.00	
Benzo (b) Fluoranthene	ND	0.49	0.062	1.00	
Benzo (g,h,i) Perylene	ND	0.49	0.054	1.00	
Benzo (k) Fluoranthene	ND	0.49	0.063	1.00	
Benzoic Acid	ND	2.4	0.48	1.00	
Benzyl Alcohol	ND	0.49	0.064	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.49	0.055	1.00	
Bis(2-Chloroethyl) Ether	ND	2.4	0.40	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.49	0.056	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.49	0.052	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.49	0.060	1.00	
Butyl Benzyl Phthalate	ND	0.49	0.053	1.00	
4-Chloro-3-Methylphenol	ND	0.49	0.065	1.00	
4-Chloroaniline	ND	0.49	0.064	1.00	
2-Chloronaphthalene	ND	0.49	0.058	1.00	
2-Chlorophenol	ND	0.49	0.065	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.49	0.063	1.00	
Chrysene	ND	0.49	0.063	1.00	
Di-n-Butyl Phthalate	ND	0.49	0.059	1.00	
Di-n-Octyl Phthalate	ND	0.49	0.098	1.00	
Dibenz (a,h) Anthracene	ND	0.49	0.045	1.00	
Dibenzofuran	ND	0.49	0.059	1.00	
1,2-Dichlorobenzene	ND	0.49	0.062	1.00	
1,3-Dichlorobenzene	ND	0.49	0.072	1.00	
1,4-Dichlorobenzene	ND	0.49	0.073	1.00	
3,3'-Dichlorobenzidine	ND	9.8	0.36	1.00	
2,4-Dichlorophenol	ND	0.49	0.057	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Parameter	Result	RL	MDL	DF	Qualifiers
Diethyl Phthalate	ND	0.49	0.057	1.00	
Dimethyl Phthalate	0.36	0.49	0.11	1.00	J
2,4-Dimethylphenol	ND	0.49	0.26	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.4	0.62	1.00	
2,4-Dinitrophenol	ND	2.4	0.33	1.00	
2,4-Dinitrotoluene	ND	0.49	0.065	1.00	
2,6-Dichlorophenol	ND	0.49	0.058	1.00	
2,6-Dinitrotoluene	ND	0.49	0.071	1.00	
Fluoranthene	ND	0.49	0.061	1.00	
Fluorene	ND	0.49	0.062	1.00	
Hexachloro-1,3-Butadiene	ND	0.49	0.062	1.00	
Hexachlorobenzene	ND	0.49	0.065	1.00	
Hexachlorocyclopentadiene	ND	2.4	0.49	1.00	
Hexachloroethane	ND	0.49	0.077	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.49	0.052	1.00	
Isophorone	ND	0.49	0.055	1.00	
2-Methylnaphthalene	ND	0.49	0.059	1.00	
1-Methylnaphthalene	ND	0.49	0.055	1.00	
2-Methylphenol	ND	0.49	0.084	1.00	
3/4-Methylphenol	ND	0.49	0.16	1.00	
N-Nitroso-di-n-propylamine	ND	0.49	0.082	1.00	
N-Nitrosodimethylamine	ND	0.49	0.046	1.00	
N-Nitrosodiphenylamine	ND	0.49	0.13	1.00	
Naphthalene	ND	0.49	0.057	1.00	
4-Nitroaniline	ND	0.49	0.064	1.00	
3-Nitroaniline	ND	0.49	0.068	1.00	
2-Nitroaniline	ND	0.49	0.051	1.00	
Nitrobenzene	ND	2.4	0.32	1.00	
4-Nitrophenol	ND	0.49	0.053	1.00	
2-Nitrophenol	ND	0.49	0.066	1.00	
Pentachlorophenol	ND	2.4	0.38	1.00	
Phenanthrene	ND	0.49	0.067	1.00	
Phenol	ND	0.49	0.047	1.00	
Pyrene	ND	0.49	0.075	1.00	
Pyridine	ND	0.49	0.053	1.00	
1,2,4-Trichlorobenzene	ND	0.49	0.058	1.00	
2,4,6-Trichlorophenol	ND	0.49	0.075	1.00	
2,4,5-Trichlorophenol	ND	0.49	0.062	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation	Date Received:	05/25/18
8710 Freeport Parkway, Suite 200	Work Order:	18-05-2282
Irving, TX 75063-2577	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Space Park		Page 3 of 6

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	63	27-120	
2-Fluorophenol	60	25-120	
Nitrobenzene-d5	59	33-123	
p-Terphenyl-d14	77	27-159	
Phenol-d6	63	26-122	
2,4,6-Tribromophenol	67	18-138	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-549-4194**	**N/A**	**Solid**	**GC/MS CCC**	**05/29/18**	**05/30/18 15:18**	**180529L11**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acenaphthene	ND	0.50	0.063	1.00	
Acenaphthylene	ND	0.50	0.060	1.00	
Aniline	ND	0.50	0.060	1.00	
Anthracene	ND	0.50	0.063	1.00	
Azobenzene	ND	0.50	0.054	1.00	
Benzidine	ND	10	0.83	1.00	
Benzo (a) Anthracene	ND	0.50	0.057	1.00	
Benzo (a) Pyrene	ND	0.50	0.054	1.00	
Benzo (b) Fluoranthene	ND	0.50	0.064	1.00	
Benzo (g,h,i) Perylene	ND	0.50	0.055	1.00	
Benzo (k) Fluoranthene	ND	0.50	0.065	1.00	
Benzoic Acid	ND	2.5	0.50	1.00	
Benzyl Alcohol	ND	0.50	0.066	1.00	
Bis(2-Chloroethoxy) Methane	ND	0.50	0.056	1.00	
Bis(2-Chloroethyl) Ether	ND	2.5	0.41	1.00	
Bis(2-Chloroisopropyl) Ether	ND	0.50	0.057	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	0.053	1.00	
4-Bromophenyl-Phenyl Ether	ND	0.50	0.061	1.00	
Butyl Benzyl Phthalate	ND	0.50	0.054	1.00	
4-Chloro-3-Methylphenol	ND	0.50	0.066	1.00	
4-Chloroaniline	ND	0.50	0.065	1.00	
2-Chloronaphthalene	ND	0.50	0.059	1.00	
2-Chlorophenol	ND	0.50	0.067	1.00	
4-Chlorophenyl-Phenyl Ether	ND	0.50	0.064	1.00	
Chrysene	ND	0.50	0.064	1.00	
Di-n-Butyl Phthalate	ND	0.50	0.060	1.00	
Di-n-Octyl Phthalate	ND	0.50	0.10	1.00	
Dibenz (a,h) Anthracene	ND	0.50	0.046	1.00	
Dibenzofuran	ND	0.50	0.060	1.00	
1,2-Dichlorobenzene	ND	0.50	0.064	1.00	
1,3-Dichlorobenzene	ND	0.50	0.073	1.00	
1,4-Dichlorobenzene	ND	0.50	0.075	1.00	
3,3'-Dichlorobenzidine	ND	10	0.36	1.00	
2,4-Dichlorophenol	ND	0.50	0.058	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Parameter	Result	RL	MDL	DF	Qualifiers
Diethyl Phthalate	ND	0.50	0.058	1.00	
Dimethyl Phthalate	ND	0.50	0.11	1.00	
2,4-Dimethylphenol	ND	0.50	0.27	1.00	
4,6-Dinitro-2-Methylphenol	ND	2.5	0.63	1.00	
2,4-Dinitrophenol	ND	2.5	0.34	1.00	
2,4-Dinitrotoluene	ND	0.50	0.067	1.00	
2,6-Dichlorophenol	ND	0.50	0.059	1.00	
2,6-Dinitrotoluene	ND	0.50	0.073	1.00	
Fluoranthene	ND	0.50	0.062	1.00	
Fluorene	ND	0.50	0.063	1.00	
Hexachloro-1,3-Butadiene	ND	0.50	0.063	1.00	
Hexachlorobenzene	ND	0.50	0.067	1.00	
Hexachlorocyclopentadiene	ND	2.5	0.50	1.00	
Hexachloroethane	ND	0.50	0.078	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.50	0.053	1.00	
Isophorone	ND	0.50	0.057	1.00	
2-Methylnaphthalene	ND	0.50	0.060	1.00	
1-Methylnaphthalene	ND	0.50	0.056	1.00	
2-Methylphenol	ND	0.50	0.087	1.00	
3/4-Methylphenol	ND	0.50	0.16	1.00	
N-Nitroso-di-n-propylamine	ND	0.50	0.084	1.00	
N-Nitrosodimethylamine	ND	0.50	0.047	1.00	
N-Nitrosodiphenylamine	ND	0.50	0.14	1.00	
Naphthalene	ND	0.50	0.059	1.00	
4-Nitroaniline	ND	0.50	0.065	1.00	
3-Nitroaniline	ND	0.50	0.070	1.00	
2-Nitroaniline	ND	0.50	0.052	1.00	
Nitrobenzene	ND	2.5	0.32	1.00	
4-Nitrophenol	ND	0.50	0.054	1.00	
2-Nitrophenol	ND	0.50	0.067	1.00	
Pentachlorophenol	ND	2.5	0.39	1.00	
Phenanthrene	ND	0.50	0.069	1.00	
Phenol	ND	0.50	0.048	1.00	
Pyrene	ND	0.50	0.077	1.00	
Pyridine	ND	0.50	0.055	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.059	1.00	
2,4,6-Trichlorophenol	ND	0.50	0.077	1.00	
2,4,5-Trichlorophenol	ND	0.50	0.064	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation	Date Received:	05/25/18
8710 Freeport Parkway, Suite 200	Work Order:	18-05-2282
Irving, TX 75063-2577	Preparation:	EPA 3545
	Method:	EPA 8270C
	Units:	mg/kg
Project: Space Park		Page 6 of 6

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	84	27-120	
2-Fluorophenol	75	25-120	
Nitrobenzene-d5	83	33-123	
p-Terphenyl-d14	89	27-159	
Phenol-d6	78	26-122	
2,4,6-Tribromophenol	78	18-138	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
01-D1-CT	**18-05-2282-1-A**	**05/24/18 15:20**	**Solid**	**GC/MS BB**	**05/25/18**	**05/25/18 17:11**	**180525L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	120	6.2	1.00	
Benzene	ND	5.0	0.13	1.00	
Bromobenzene	ND	5.0	0.21	1.00	
Bromochloromethane	ND	5.0	0.69	1.00	
Bromodichloromethane	ND	5.0	0.23	1.00	
Bromoform	ND	5.0	0.79	1.00	
Bromomethane	ND	25	9.4	1.00	
2-Butanone	ND	50	3.8	1.00	
n-Butylbenzene	ND	5.0	0.16	1.00	
sec-Butylbenzene	ND	5.0	0.58	1.00	
tert-Butylbenzene	ND	5.0	0.15	1.00	
Carbon Disulfide	ND	50	0.31	1.00	
Carbon Tetrachloride	ND	5.0	0.28	1.00	
Chlorobenzene	ND	5.0	0.22	1.00	
Chloroethane	ND	5.0	1.5	1.00	
Chloroform	ND	5.0	0.24	1.00	
Chloromethane	ND	25	0.30	1.00	
2-Chlorotoluene	ND	5.0	0.23	1.00	
4-Chlorotoluene	ND	5.0	0.21	1.00	
Dibromochloromethane	ND	5.0	0.57	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.7	1.00	
1,2-Dibromoethane	ND	5.0	0.26	1.00	
Dibromomethane	ND	5.0	0.77	1.00	
1,2-Dichlorobenzene	ND	5.0	0.23	1.00	
1,3-Dichlorobenzene	ND	5.0	0.18	1.00	
1,4-Dichlorobenzene	ND	5.0	0.22	1.00	
Dichlorodifluoromethane	ND	5.0	0.44	1.00	
1,1-Dichloroethane	ND	5.0	0.21	1.00	
1,2-Dichloroethane	ND	5.0	0.31	1.00	
1,1-Dichloroethene	ND	5.0	0.35	1.00	
c-1,2-Dichloroethene	ND	5.0	0.28	1.00	
t-1,2-Dichloroethene	ND	5.0	0.51	1.00	
1,2-Dichloropropane	ND	5.0	0.44	1.00	
1,3-Dichloropropane	ND	5.0	0.25	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Space Park

Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	5.0	0.33	1.00	
1,1-Dichloropropene	ND	5.0	0.33	1.00	
c-1,3-Dichloropropene	ND	5.0	0.25	1.00	
t-1,3-Dichloropropene	ND	5.0	0.61	1.00	
Ethylbenzene	ND	5.0	0.15	1.00	
2-Hexanone	ND	50	1.8	1.00	
Isopropylbenzene	ND	5.0	0.55	1.00	
p-Isopropyltoluene	ND	5.0	0.63	1.00	
Methylene Chloride	ND	50	1.3	1.00	
4-Methyl-2-Pentanone	ND	50	4.3	1.00	
Naphthalene	ND	50	0.81	1.00	
n-Propylbenzene	ND	5.0	0.50	1.00	
Styrene	ND	5.0	0.60	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	0.24	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	0.35	1.00	
Tetrachloroethene	ND	5.0	0.21	1.00	
Toluene	ND	5.0	0.52	1.00	
1,2,3-Trichlorobenzene	ND	10	0.91	1.00	
1,2,4-Trichlorobenzene	ND	5.0	0.31	1.00	
1,1,1-Trichloroethane	ND	5.0	0.23	1.00	
1,1,2-Trichloroethane	ND	5.0	0.35	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	0.35	1.00	
Trichloroethene	ND	5.0	0.30	1.00	
1,2,3-Trichloropropane	ND	5.0	0.83	1.00	
1,2,4-Trimethylbenzene	ND	5.0	0.59	1.00	
Trichlorofluoromethane	ND	50	0.38	1.00	
1,3,5-Trimethylbenzene	ND	5.0	0.55	1.00	
Vinyl Acetate	ND	50	4.7	1.00	
Vinyl Chloride	ND	5.0	0.50	1.00	
p/m-Xylene	ND	5.0	0.27	1.00	
o-Xylene	ND	5.0	0.56	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	0.30	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	80-120	
Dibromofluoromethane	93	79-133	
1,2-Dichloroethane-d4	106	71-155	
Toluene-d8	100	80-120	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: Space Park

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-14113**	**N/A**	**Solid**	**GC/MS BB**	**05/25/18**	**05/25/18 16:13**	**180525L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	120	6.2	1.00	
Benzene	ND	5.0	0.13	1.00	
Bromobenzene	ND	5.0	0.21	1.00	
Bromochloromethane	ND	5.0	0.69	1.00	
Bromodichloromethane	ND	5.0	0.23	1.00	
Bromoform	ND	5.0	0.79	1.00	
Bromomethane	ND	25	9.4	1.00	
2-Butanone	ND	50	3.8	1.00	
n-Butylbenzene	ND	5.0	0.16	1.00	
sec-Butylbenzene	ND	5.0	0.58	1.00	
tert-Butylbenzene	ND	5.0	0.15	1.00	
Carbon Disulfide	ND	50	0.31	1.00	
Carbon Tetrachloride	ND	5.0	0.28	1.00	
Chlorobenzene	ND	5.0	0.22	1.00	
Chloroethane	ND	5.0	1.5	1.00	
Chloroform	ND	5.0	0.24	1.00	
Chloromethane	ND	25	0.30	1.00	
2-Chlorotoluene	ND	5.0	0.23	1.00	
4-Chlorotoluene	ND	5.0	0.21	1.00	
Dibromochloromethane	ND	5.0	0.57	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.7	1.00	
1,2-Dibromoethane	ND	5.0	0.26	1.00	
Dibromomethane	ND	5.0	0.77	1.00	
1,2-Dichlorobenzene	ND	5.0	0.23	1.00	
1,3-Dichlorobenzene	ND	5.0	0.18	1.00	
1,4-Dichlorobenzene	ND	5.0	0.22	1.00	
Dichlorodifluoromethane	ND	5.0	0.44	1.00	
1,1-Dichloroethane	ND	5.0	0.21	1.00	
1,2-Dichloroethane	ND	5.0	0.31	1.00	
1,1-Dichloroethene	ND	5.0	0.35	1.00	
c-1,2-Dichloroethene	ND	5.0	0.28	1.00	
t-1,2-Dichloroethene	ND	5.0	0.51	1.00	
1,2-Dichloropropane	ND	5.0	0.44	1.00	
1,3-Dichloropropane	ND	5.0	0.25	1.00	

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

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Analytical Report

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	5.0	0.33	1.00	
1,1-Dichloropropene	ND	5.0	0.33	1.00	
c-1,3-Dichloropropene	ND	5.0	0.25	1.00	
t-1,3-Dichloropropene	ND	5.0	0.61	1.00	
Ethylbenzene	ND	5.0	0.15	1.00	
2-Hexanone	ND	50	1.8	1.00	
Isopropylbenzene	ND	5.0	0.55	1.00	
p-Isopropyltoluene	ND	5.0	0.63	1.00	
Methylene Chloride	ND	50	1.3	1.00	
4-Methyl-2-Pentanone	ND	50	4.3	1.00	
Naphthalene	ND	50	0.81	1.00	
n-Propylbenzene	ND	5.0	0.50	1.00	
Styrene	ND	5.0	0.60	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	0.24	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	0.35	1.00	
Tetrachloroethene	ND	5.0	0.21	1.00	
Toluene	ND	5.0	0.52	1.00	
1,2,3-Trichlorobenzene	ND	10	0.91	1.00	
1,2,4-Trichlorobenzene	ND	5.0	0.31	1.00	
1,1,1-Trichloroethane	ND	5.0	0.23	1.00	
1,1,2-Trichloroethane	ND	5.0	0.35	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	0.35	1.00	
Trichloroethene	ND	5.0	0.30	1.00	
1,2,3-Trichloropropane	ND	5.0	0.83	1.00	
1,2,4-Trimethylbenzene	ND	5.0	0.59	1.00	
Trichlorofluoromethane	ND	50	0.38	1.00	
1,3,5-Trimethylbenzene	ND	5.0	0.55	1.00	
Vinyl Acetate	ND	50	4.7	1.00	
Vinyl Chloride	ND	5.0	0.50	1.00	
p/m-Xylene	ND	5.0	0.27	1.00	
o-Xylene	ND	5.0	0.56	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	0.30	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	80-120	
Dibromofluoromethane	100	79-133	
1,2-Dichloroethane-d4	107	71-155	
Toluene-d8	99	80-120	

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

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3550B
Method: EPA 8015B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-05-2198-1	**Sample**	**Solid**	**GC 50**	**05/29/18**	**05/29/18 16:49**	**180529S08**
18-05-2198-1	**Matrix Spike**	**Solid**	**GC 50**	**05/29/18**	**05/29/18 15:29**	**180529S08**
18-05-2198-1	**Matrix Spike Duplicate**	**Solid**	**GC 50**	**05/29/18**	**05/29/18 15:49**	**180529S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	1654	400.0	2344	173	2075	105	33-153	12	0-32	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8015B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-D1-CT	**Sample**	**Solid**	**GC 57**	**05/25/18**	**05/26/18 00:18**	**180525S022**
01-D1-CT	**Matrix Spike**	**Solid**	**GC 57**	**05/25/18**	**05/26/18 00:50**	**180525S022**
01-D1-CT	**Matrix Spike Duplicate**	**Solid**	**GC 57**	**05/25/18**	**05/26/18 01:22**	**180525S022**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics	ND	10.00	8.807	88	8.562	86	66-108	3	0-18	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3050B
Method: EPA 6010B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-05-2438-1	**Sample**	**Solid**	**ICP 7300**	**05/30/18**	**05/30/18 16:18**	**180530S01**
18-05-2438-1	**Matrix Spike**	**Solid**	**ICP 7300**	**05/30/18**	**05/30/18 16:19**	**180530S01**
18-05-2438-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/30/18**	**05/30/18 16:19**	**180530S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	2.986	12	3.352	13	50-115	12	0-20	3
Arsenic	7.841	25.00	29.42	86	30.40	90	75-125	3	0-20	
Barium	130.5	25.00	134.0	4X	132.3	4X	75-125	4X	0-20	Q
Beryllium	0.7453	25.00	25.91	101	26.76	104	75-125	3	0-20	
Cadmium	0.7363	25.00	24.84	96	26.25	102	75-125	5	0-20	
Chromium	24.13	25.00	49.61	102	50.28	105	75-125	1	0-20	
Cobalt	11.54	25.00	34.90	93	36.05	98	75-125	3	0-20	
Copper	15.86	25.00	42.01	105	42.90	108	75-125	2	0-20	
Lead	7.345	25.00	31.92	98	33.33	104	75-125	4	0-20	
Molybdenum	2.310	25.00	23.22	84	24.21	88	75-125	4	0-20	
Nickel	19.75	25.00	43.88	97	45.50	103	75-125	4	0-20	
Selenium	ND	25.00	23.45	94	23.40	94	75-125	0	0-20	
Silver	ND	12.50	12.21	98	12.72	102	75-125	4	0-20	
Thallium	ND	25.00	17.42	70	21.71	87	75-125	22	0-20	3,4
Vanadium	47.00	25.00	72.26	101	72.46	102	75-125	0	0-20	
Zinc	52.95	25.00	77.22	97	79.33	106	75-125	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 7471A Total
Method: EPA 7471A
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-05-2208-3	**Sample**	**Solid**	**Mercury 08**	**05/29/18**	**05/29/18 14:41**	**180529S02**
18-05-2208-3	**Matrix Spike**	**Solid**	**Mercury 08**	**05/29/18**	**05/29/18 14:43**	**180529S02**
18-05-2208-3	**Matrix Spike Duplicate**	**Solid**	**Mercury 08**	**05/29/18**	**05/29/18 14:45**	**180529S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8356	100	0.8290	99	71-137	1	0-14	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8082

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-D1-CT	**Sample**	**Solid**	**GC 31**	**05/29/18**	**05/30/18 13:29**	**180529S13**
01-D1-CT	**Matrix Spike**	**Solid**	**GC 31**	**05/29/18**	**05/30/18 12:51**	**180529S13**
01-D1-CT	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**05/29/18**	**05/30/18 13:10**	**180529S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	94.00	94	104.0	104	50-135	10	0-20	
Aroclor-1260	ND	100.0	86.00	86	89.00	89	50-135	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 3545
Method: EPA 8270C

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-D1-CT	**Sample**	**Solid**	**GC/MS CCC**	**05/29/18**	**05/30/18 16:49**	**180529S11**
01-D1-CT	**Matrix Spike**	**Solid**	**GC/MS CCC**	**05/29/18**	**05/30/18 17:27**	**180529S11**
01-D1-CT	**Matrix Spike Duplicate**	**Solid**	**GC/MS CCC**	**05/29/18**	**05/30/18 17:45**	**180529S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	7.134	71	6.748	67	34-148	6	0-20	
Acenaphthylene	ND	10.00	7.243	72	6.891	69	53-120	5	0-20	
Butyl Benzyl Phthalate	ND	10.00	6.273	63	6.725	67	15-189	7	0-20	
4-Chloro-3-Methylphenol	ND	10.00	7.486	75	6.801	68	32-120	10	0-20	
2-Chlorophenol	ND	10.00	7.739	77	7.046	70	53-120	9	0-20	
1,4-Dichlorobenzene	ND	10.00	6.721	67	6.318	63	43-120	6	0-26	
Dimethyl Phthalate	ND	10.00	7.452	75	7.217	72	44-122	3	0-20	
2,4-Dinitrotoluene	ND	10.00	7.906	79	7.378	74	28-120	7	0-20	
Fluorene	ND	10.00	7.105	71	6.733	67	12-186	5	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	8.032	80	7.146	71	38-140	12	0-20	
Naphthalene	ND	10.00	7.067	71	6.668	67	20-140	6	0-20	
4-Nitrophenol	ND	10.00	7.146	71	6.147	61	14-128	15	0-59	
Pentachlorophenol	ND	10.00	4.582	46	3.815	38	10-124	18	0-20	
Phenol	ND	10.00	7.836	78	6.986	70	22-124	11	0-20	
Pyrene	ND	10.00	6.203	62	6.782	68	31-169	9	0-20	
1,2,4-Trichlorobenzene	ND	10.00	7.128	71	6.677	67	56-120	7	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Northrop Grumman Systems Corporation
8710 Freeport Parkway, Suite 200
Irving, TX 75063-2577

Project: Space Park

Date Received: 05/25/18
Work Order: 18-05-2282
Preparation: EPA 5030C
Method: EPA 8260B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-D1-CT	**Sample**	**Solid**	**GC/MS BB**	**05/25/18**	**05/25/18 17:11**	**180525S007**
01-D1-CT	**Matrix Spike**	**Solid**	**GC/MS BB**	**05/25/18**	**05/25/18 17:40**	**180525S007**
01-D1-CT	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**05/25/18**	**05/25/18 18:09**	**180525S007**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	47.08	94	46.22	92	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	33.31	67	34.63	69	51-135	4	0-29	
Chlorobenzene	ND	50.00	43.79	88	42.84	86	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	46.77	94	45.23	90	64-124	3	0-20	
1,2-Dichlorobenzene	ND	50.00	44.44	89	43.24	86	35-131	3	0-25	
1,2-Dichloroethane	ND	50.00	48.58	97	45.51	91	80-120	7	0-20	
1,1-Dichloroethene	ND	50.00	38.96	78	39.23	78	47-143	1	0-25	
Ethylbenzene	ND	50.00	43.80	88	44.14	88	57-129	1	0-22	
Toluene	ND	50.00	44.05	88	44.11	88	63-123	0	0-20	
Trichloroethene	ND	50.00	67.11	134	74.28	149	44-158	10	0-20	
Vinyl Chloride	ND	50.00	41.89	84	40.02	80	49-139	5	0-47	
p/m-Xylene	ND	100.0	85.33	85	84.76	85	70-130	1	0-30	
o-Xylene	ND	50.00	43.34	87	42.62	85	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	37.06	74	36.06	72	57-123	3	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 3550B
		Method:	EPA 8015B
Project: Space Park			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-414-1101	**LCS**	**Solid**	**GC 50**	**05/29/18**	**05/29/18 14:50**	**180529B08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Diesel Range Organics	400.0	348.5	87	67-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 5030C
		Method:	EPA 8015B
Project: Space Park			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-024-1205	**LCS**	**Solid**	**GC 57**	**05/25/18**	**05/25/18 13:09**	**180525L054**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Gasoline Range Organics	10.00	9.981	100	70-118	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Space Park			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-26376	**LCS**	**Solid**	**ICP 7300**	**05/30/18**	**05/30/18 16:17**	**180530L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	20.34	81	80-120	73-127	
Arsenic	25.00	19.00	76	80-120	73-127	ME
Barium	25.00	24.61	98	80-120	73-127	
Beryllium	25.00	23.52	94	80-120	73-127	
Cadmium	25.00	23.94	96	80-120	73-127	
Chromium	25.00	23.95	96	80-120	73-127	
Cobalt	25.00	24.91	100	80-120	73-127	
Copper	25.00	23.88	96	80-120	73-127	
Lead	25.00	25.68	103	80-120	73-127	
Molybdenum	25.00	23.70	95	80-120	73-127	
Nickel	25.00	25.35	101	80-120	73-127	
Selenium	25.00	22.84	91	80-120	73-127	
Silver	12.50	11.61	93	80-120	73-127	
Thallium	25.00	24.67	99	80-120	73-127	
Vanadium	25.00	23.37	93	80-120	73-127	
Zinc	25.00	24.50	98	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Space Park			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-3858	**LCS**	**Solid**	**Mercury 08**	**05/29/18**	**05/29/18 14:38**	**180529L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7896	95	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 3545
		Method:	EPA 8082
Project: Space Park			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-535-4682	**LCS**	**Solid**	**GC 31**	**05/29/18**	**05/30/18 12:32**	**180529L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	103.0	103	50-135	
Aroclor-1260	100.0	89.00	89	50-135	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 3545
		Method:	EPA 8270C
Project: Space Park			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-549-4194	**LCS**	**Solid**	**GC/MS CCC**	**05/29/18**	**05/30/18 15:37**	**180529L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Acenaphthene	10.00	7.239	72	51-123	39-135	
Acenaphthylene	10.00	7.364	74	52-120	41-131	
Butyl Benzyl Phthalate	10.00	7.416	74	43-139	27-155	
4-Chloro-3-Methylphenol	10.00	7.278	73	55-121	44-132	
2-Chlorophenol	10.00	7.746	77	58-124	47-135	
1,4-Dichlorobenzene	10.00	7.504	75	42-132	27-147	
Dimethyl Phthalate	10.00	7.454	75	51-123	39-135	
2,4-Dinitrotoluene	10.00	7.948	79	51-129	38-142	
Fluorene	10.00	7.076	71	54-126	42-138	
N-Nitroso-di-n-propylamine	10.00	8.252	83	40-136	24-152	
Naphthalene	10.00	7.490	75	32-146	13-165	
4-Nitrophenol	10.00	6.229	62	24-126	7-143	
Pentachlorophenol	10.00	4.211	42	23-131	5-149	
Phenol	10.00	7.608	76	40-130	25-145	
Pyrene	10.00	7.184	72	47-143	31-159	
1,2,4-Trichlorobenzene	10.00	7.792	78	45-129	31-143	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Northrop Grumman Systems Corporation		Date Received:	05/25/18
8710 Freeport Parkway, Suite 200		Work Order:	18-05-2282
Irving, TX 75063-2577		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Space Park			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-14113	**LCS**	**Solid**	**GC/MS BB**	**05/25/18**	**05/25/18 15:15**	**180525L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	58.66	117	80-120	73-127	
Carbon Tetrachloride	50.00	43.40	87	65-137	53-149	
Chlorobenzene	50.00	54.40	109	80-120	73-127	
1,2-Dibromoethane	50.00	53.83	108	80-120	73-127	
1,2-Dichlorobenzene	50.00	53.06	106	80-120	73-127	
1,2-Dichloroethane	50.00	55.93	112	80-120	73-127	
1,1-Dichloroethene	50.00	47.15	94	68-128	58-138	
Ethylbenzene	50.00	54.84	110	80-120	73-127	
Toluene	50.00	54.57	109	80-120	73-127	
Trichloroethene	50.00	53.19	106	80-120	73-127	
Vinyl Chloride	50.00	44.42	89	67-127	57-137	
p/m-Xylene	100.0	106.2	106	75-125	67-133	
o-Xylene	50.00	53.26	107	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	42.31	85	70-124	61-133	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Glossary of Terms and Qualifiers

Work Order: 18-05-2282 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.
B	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.

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CHAIN OF CUSTODY RECORD

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

WO # / LAB USE ONLY: **18-05-2282**

DATE: 5/24/18
PAGE: 1 OF 1

LABORATORY CLIENT: Northrop Grumman
ADDRESS: One Space Park
CITY: Redondo Beach STATE: CA ZIP: 90278
TEL: 310-813-3189 E-MAIL: doug.hill@ngc.com

CLIENT PROJECT NAME / NUMBER: Space Park
P.O. NO.: 4800011247
PROJECT CONTACT: Doug Hill
SAMPLER(S): (PRINT) James Smith

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☒ 48 HR ☐ 72 HR ☐ 7 Days (standard)

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	EPA 8015 GRO	EPA 8015 DRO	EPA 6010/7471 Title 22 Metals	EPA 8082 PCBs	EPA 8260B VOCs	EPA 8270C Semi-Volatile Organics
1	01-01-CT	5-24-18	1526	S	1				✓	✓	✓	✓	✓	✓

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
James Smith	[signature] EC	5/25/18	1206
[signature]	[signature]	5/25/18	13 52
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

06/02/14 Revision

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WORK ORDER NUMBER: 18-05-2282

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: NORTHROP GRUMMAN

DATE: 05/25/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.3 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1017

SAMPLE CONDITION:	Yes	No	N/A
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 time			
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	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
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 Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna_2 ☐ 100PJ ☐ 100PJna_2 ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☐ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGBna_2 ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☐ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ 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 = HNO_3, na = NaOH, na_2 = $Na_2S_2O_3$, p = H_3PO_4, s = H_2SO_4, u = ultra-pure, x = Na_2SO_3+$NaHSO_4.H_2O$, znna = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1017

Reviewed by: 1S

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REPUBLIC SERVICES

PROPOSAL

6/18/2018

Rick Fleming
UDC BLDG D1 Special Waste *TEMP R/O*
3001 AVIATION BLVD
REDONDO BEACH, CA 90278
Quote: A183330748

UDC:

Below is our proposal of recommended services, customized for your business needs identified during our discussions. If you ever need additional services, or just need an extra pickup, please give us a call at 800-299-4898. It's that easy.

Service Details

LARGE CONTAINERS

Equipment Qty/Type/Size:	1 - Open Top 10.00Yd(s)	Haul Rate:	$620.00 per haul
Frequency:	On-Call	Tons Included in Haul Rate:	5.0
Material Type:	Special Waste	Additional Tons:	$44.99 per ton
Hauls/ month:	1.0		

Estimated Monthly Amount *

Large Container Haul Charge	$620.00
Total Estimated Amount	$620.00

One Time Charges

Delivery Charge Subtotal	$157.50
Valued Customer Discount - Delivery	-$82.50
Total One-Time Amount	$75.00

Sam Minh Ho
Republic Services
747.245.9283
MHo@republicservices.com
www.republicservices.com

* The Total Estimated Amount is merely an estimate of your typical monthly invoice amount without one-time start-up charges (e.g., delivery). It does not include any applicable taxes or local fees, which would be additional charges on your invoice.

** FRF, ERF & ADMIN: The Fuel Recovery Fee (FRF) is a variable charge that changes monthly. For more information on the FRF, Environmental Recovery Fee (ERF) and Administrative Fee, please visit the links available on the Bill Pay page of our website, www.republicservices.com. The proposed rates above are valid for 60 days. This proposal is not a contract or agreement or an offer to enter into a contract or agreement. The purpose of this proposal is to set forth the proposed framework of service offerings and rates and fees for those offerings. Any transaction based upon this proposal is subject to and conditioned upon the execution by both parties of Republic Services' Customer Service Agreement.

INVOICE TO			
CUSTOMER NAME	UDC		
ATTN:	Rick Fleming		
ADDRESS	1041 N KRAEMER PL		
CITY STATE	ANAHEIM, CA		
ZIP CODE	92806-2611		
TEL. NO.	(714) 240-5024	FAX NO.	

SITE LOCATION			
SITE NAME	UDC BLDG D1 Special Waste *TEMP R/O*		
ADDRESS	3001 AVIATION BLVD		
CITY STATE	REDONDO BEACH, CA		
ZIP CODE	90278		
TEL. NO.	(714) 936-3879	FAX NO.	
AUTHORIZED BY:	Rick Fleming	TITLE	
CONTACT	Rick Fleming	TITLE	

REPUBLIC SERVICES

Temporary Service Agreement

AGREEMENT NUMBER	A183330748
ACCOUNT NUMBER	902-146927

EMAIL rfleming@udccorporation.com

N/O	CONT. GRP	TYPE	SIZE	C	QTY	ACCT. TYPE	C/O	SERV. FREQUENCY	EST. LIFTS	S	P.O. REQ	RECPT. REQ	L/F CODE	OPEN/ CLOSE DATE	LIFT CHARGE	MONTHLY SERVICE	EXTRA LIFT	DISP RATE	ADDITIONAL CHARGES	ONE TIME CHARGES		TC/RC CMP
N		RO	10.00Yd(s)	N	1	T	N	O/C	1.0	X		N	SSSW	6/20/2018	$620.00			$44.99 over 5.0 tons		Delivery Dry Run Relocate Removal Washout	$75.00 $150.70 $165.00 $165.00 $150.70	

Consolidated Disposal Service, L.L.C. DBA Allied Waste Services, Republic Services, Republic Services of Southern California
HEREINAFTER REFERRED TO AS THE "COMPANY"

The undersigned individual signing this Agreement on behalf of the Customer acknowledges that he or she has read and understands the terms and conditions of this Agreement and that he or she has the authority to sign the Agreement on behalf of the Customer.

BY: Sam Ho (AUTHORIZED SIGNATURE)

TITLE: Construction Solution Executive

BY: (AUTHORIZED SIGNATURE)

TITLE: SR PROJ MGR

RICK FLEMING (CUSTOMER NAME (PLEASE PRINT))

6-18-18 (DATE OF AGREEMENT)

COMMENTS

Valued Customer Discount - Delivery for 1 container RO 10.00 yard - $39.37

Delivery Notes:
Safety: No Safety Concerns

Exempt From: Fuel Recovery Fee, Environmental Recovery Fee, Administrative Fee

Bin already located on site and ready for disposal.

TERMS AND CONDITIONS

SERVICES. Customer grants to Company the right to collect, transport, and dispose of or recycle all of customer's non-hazardous solid waste materials (including Recyclable Materials) (collectively, "Waste Materials"), and Company agrees to furnish such services as permitted by Applicable Laws. Company agrees to respond to customer's inquiries regarding the services within 30 days of such inquiry.

TERM. THE TERM OF THIS AGREEMENT SHALL START ON THE DATE ON WHICH SERVICE UNDER THIS AGREEMENT COMMENCES AND SHALL CONTINUE UNTIL THE EARLIER OF CUSTOMER GIVING WRITTEN NOTICE TO COMPANY OF THE FINAL PULL UNDER THIS AGREEMENT OR 30 DAYS AFTER WRITTEN NOTICE TO COMPANY. COMPANY MAY TERMINATE THIS AGREEMENT AT ANY TIME BY ORAL OR WRITTEN NOTICE TO CUSTOMER. COMPANY SHALL REMOVE ALL EQUIPMENT PROVIDED TO CUSTOMER WITHIN 30 DAYS OF THE EFFECTIVE DATE OF THE TERMINATION OF SERVICES.

WASTE MATERIALS. The Waste Materials shall not contain any hazardous materials, wastes or substances; toxic substances, wastes or pollutants; contaminants; pollutants; infectious wastes; medical wastes; or radioactive wastes (collectively, "Excluded Waste"), each as defined by applicable federal, state or local laws or regulations (collectively, "Applicable Laws"). **CUSTOMER SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS COMPANY FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES, SUITS, PENALTIES, FINES, REMEDIATION COSTS, AND LIABILITIES (INCLUDING COURT COSTS AND REASONABLE ATTORNEYS' FEES) (COLLECTIVELY, "LOSSES") RESULTING FROM THE INCLUSION OF EXCLUDED WASTE IN THE WASTE MATERIALS.**

TITLE. Company shall acquire title to Waste Materials when they are loaded into Company's truck. Title to and liability for any Excluded Waste shall remain with Customer and shall at no time pass to Company.

CONTINUED ON NEXT PAGE

TERMS AND CONDITIONS (Continued from previous page)

PAYMENT. Customer shall pay Company for the services and equipment furnished by Company at the rates provided in this Agreement. Customer shall pay all taxes, fees and other governmental charges assessed against or passed through to Company (other than income or real property taxes). Customer shall pay such fees as the Company may impose from time to time by notice to Customer (including, by way of example only, late payment fees, administrative fees and environmental fees), with Company to determine the amounts of such fees in its discretion up to the maximum amount allowed by Applicable Law. Without limiting the foregoing, Customer shall pay Company: (a) a fee of $50 (which Company may increase from time to time by notice to Customer) for each check submitted by Customer that is an insufficient funds check or is returned or dishonored; and (b) fuel/environmental recovery fees in the amount shown on each of Company's invoices, which amount Company may increase or decrease from time to time by showing the amount on the invoice. Customer shall pay Company within 20 days after the date of Company's invoice. At any time after Company becomes concerned about Customer's creditworthiness or after Customer has made any late payment, Company may request, and if requested Customer shall pay, a deposit in an amount equal to one month's charges under this Agreement.

RATE ADJUSTMENTS. Company may, from time to time by 30 days prior written notice to Customer, increase the rates provided in this Agreement to adjust for any increase in: (a) disposal costs; (b) transportation costs due to a change in location of Customer or the disposal or recycling facility used by Company; (c) the Consumer Price Index for All Urban Consumers(Water, Sewer and Trash Collection Services), U.S. City Average; (d) the average weight per cubic yard of Customer's Waste Materials above the number of pounds per cubic yard upon which the rates provided in this Agreement are based as indicated on the cover page of this Agreement; (e) recycling sorting, processing and related costs; (f) costs related to Customer's failure to separate Recyclable Materials from other Waste Materials, the contamination of the Recyclable Materials, or other decreases in the value of the Recyclable Materials; or (g) Company's costs due to changes in Applicable Laws. Company may increase rates for reasons other than those set forth above with Customer's consent, which may be evidenced verbally, in writing or by the parties' actions and practices.

SERVICE CHANGES. The parties may change the type, size or amount of equipment, the type or frequency of service, and correspondingly the rates by agreement of the parties, which may be evidenced verbally, in writing or by the parties' actions and practices. This Agreement shall apply to any change of location of Customer within the area in which Company provides collection and disposal services.

RECYCLABLE MATERIALS. This section applies in the event Company has expressly agreed to remove and transport Recyclable Materials (material that Company determines can be recycled typically including, without limitation, aluminum cans (UBC – Used Beverage Containers), cardboard (free of wax), ferrous metal cans, mixed office paper, newspaper and plastics containers) to a material recovery facility, recycling center or similar facility. Customer agrees that Company in its sole discretion may determine any single load is contaminated and may refuse to collect it or may charge Customer for any additional costs, including (but not limited to) sorting, processing, transportation and disposal costs. Customer shall comply with all Applicable Laws regarding the separation of solid waste from Recyclable Materials and use of its best efforts to not place items in the container that may result in the decrease in the value of Recyclable Materials or make the Recyclable Materials unsuitable for recycling.

RESPONSIBILITY FOR EQUIPMENT; ACCESS. Any equipment Company furnishes shall remain Company's property. Customer shall be liable for all loss or damage to such equipment (except for normal wear and tear and for loss or damage resulting from Company's handling of the equipment). Customer shall use the equipment only for its proper and intended purpose and shall not overload (by weight or volume), move or alter the equipment. **CUSTOMER SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS COMPANY FROM AND AGAINST ALL LOSSES ARISING FROM ANY INJURY OR DEATH TO PERSONS OR LOSS OR DAMAGE TO PROPERTY (INCLUDING THE EQUIPMENT) ARISING OUT OF CUSTOMER'S USE, OPERATION OR POSSESSION OF THE EQUIPMENT.** Customer shall provide safe, unobstructed access to the equipment on the scheduled collection day. Company may charge an additional fee for any additional collection service required by Customer's failure to provide access.

DAMAGE TO PAVEMENT. Company shall not be responsible for any damages to Customer's pavement, curbing or other driving surfaces resulting from Company's providing service at Customer's location.

SUSPENSION. If any amount due from Customer is not paid within 60 days after the date of Company's invoice, Company may, without notice and without terminating this Agreement, suspend collecting and disposing of Waste Materials until Customer has paid such amount to Company. If Company suspends service, Customer shall pay Company aservice interruption fee in an amount determined by Company in its discretion up to the maximum amount allowed by Applicable Law.

ASSIGNMENT. Customer shall not assign this Agreement without Company's prior written consent, which Company shall not unreasonably withhold. Company may assign this Agreement without Customer's consent.

EXCUSED PERFORMANCE. Except for Customer's obligation to pay amounts due to Company, any failure or delay in performance due to contingencies beyond a party's reasonable control, including strikes, riots, terrorist acts, compliance with Applicable Laws or governmental orders, fires and acts of God, shall not constitute a breach of this Agreement.

ATTORNEYS' FEES. If any litigation is commenced under this Agreement, the successful party shall be entitled to recover, in addition to such other relief as the court may award, its reasonable attorneys' fees, expert witness fees, litigation related expenses, and court or other costs incurred in such litigation or proceeding.

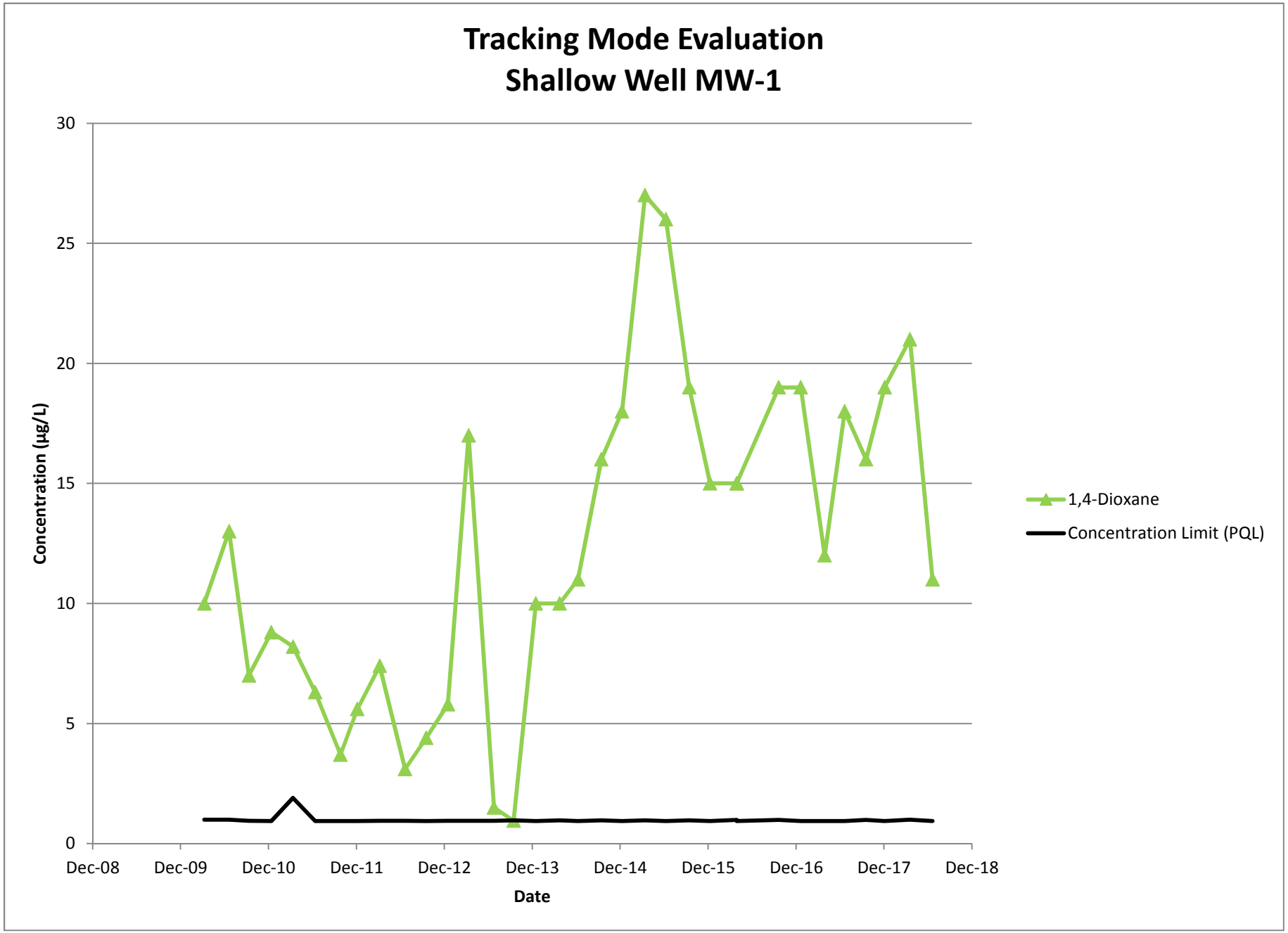
MISCELLANEOUS. This Agreement sets forth the entire agreement of the parties and supersedes all prior agreements, whether written or oral, that exist between the parties regarding the subject matter of this Agreement. Company shall have no confidentiality obligation with respect to any Waste Materials. This Agreement shall be binding upon and inure solely to the benefit of the parties and their permitted assigns. If any provision of this Agreement shall be invalid, illegal or unenforceable, it shall be modified so as to be valid, legal and enforceable but so as most nearly to retain the intent of the parties. If such modification is not possible, such provision shall be severed from this Agreement. In either case, the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected thereby. Customer and Company agree that electronic signatures are valid and effective, and that an electronically stored copy of this Agreement constitutes proof of the signature and contents of this Agreement, as though it were an original.

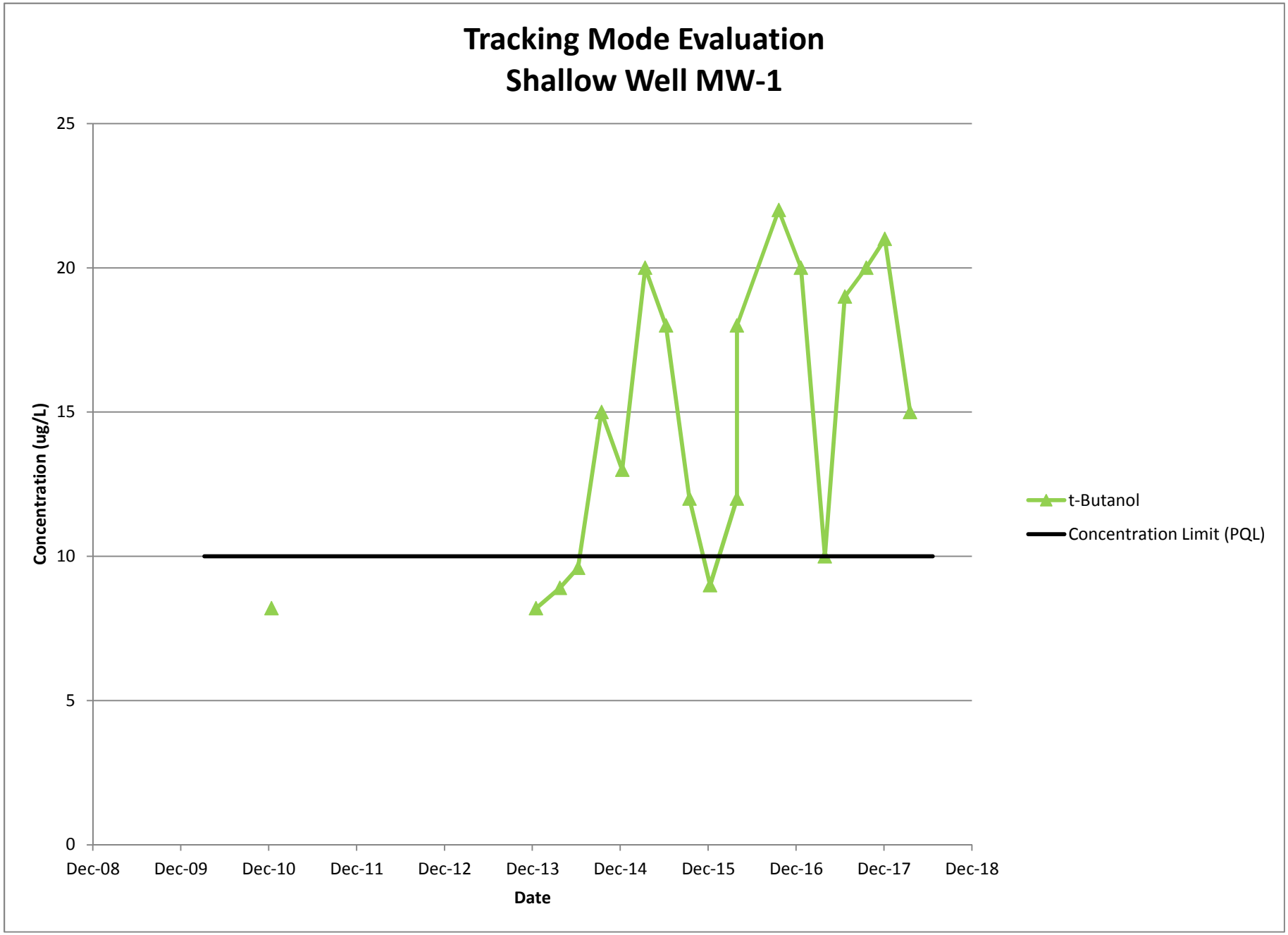
CUSTOMER'S INITIAL: _____ DATE: 6-18-18

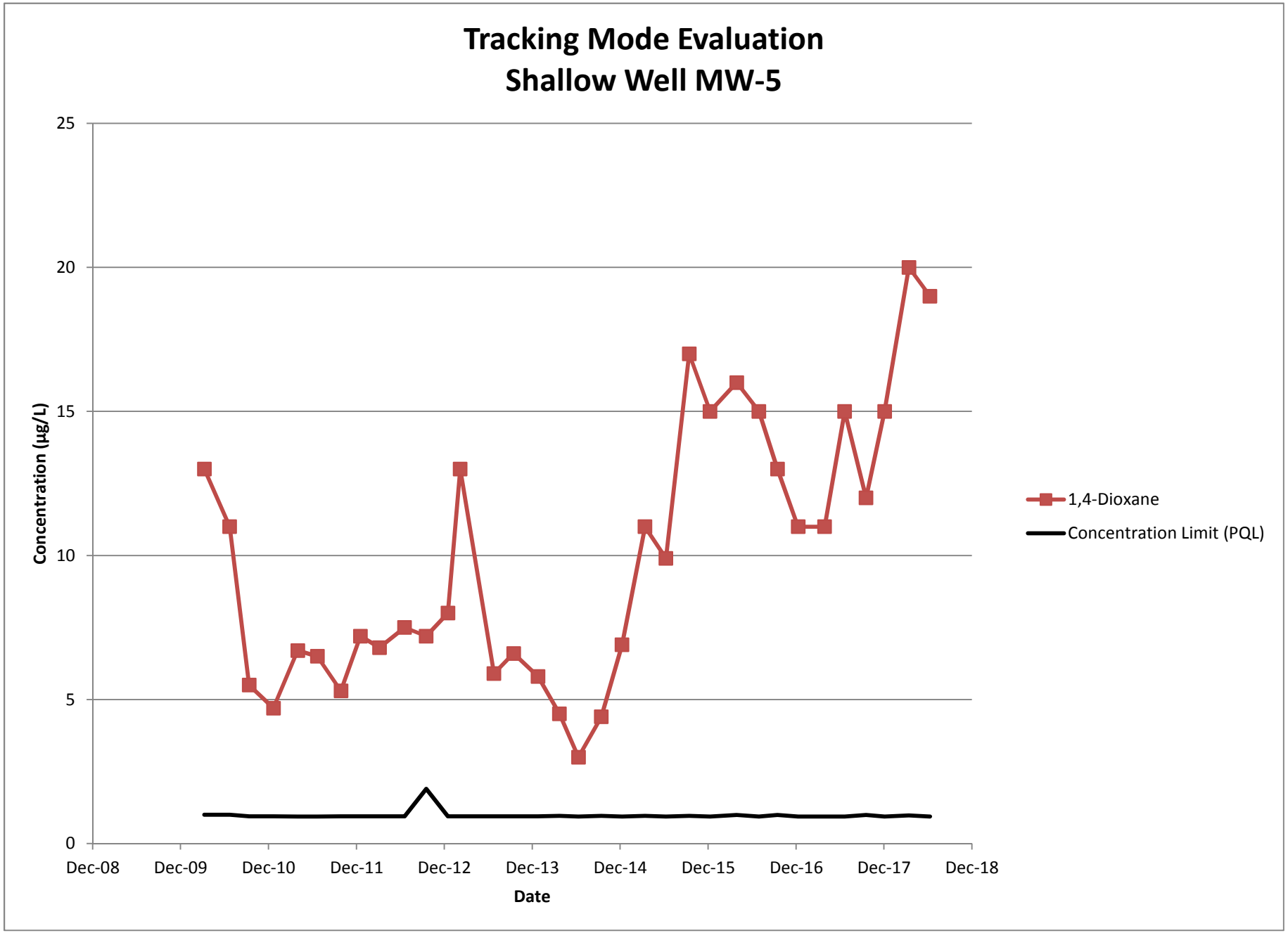
APPENDIX G

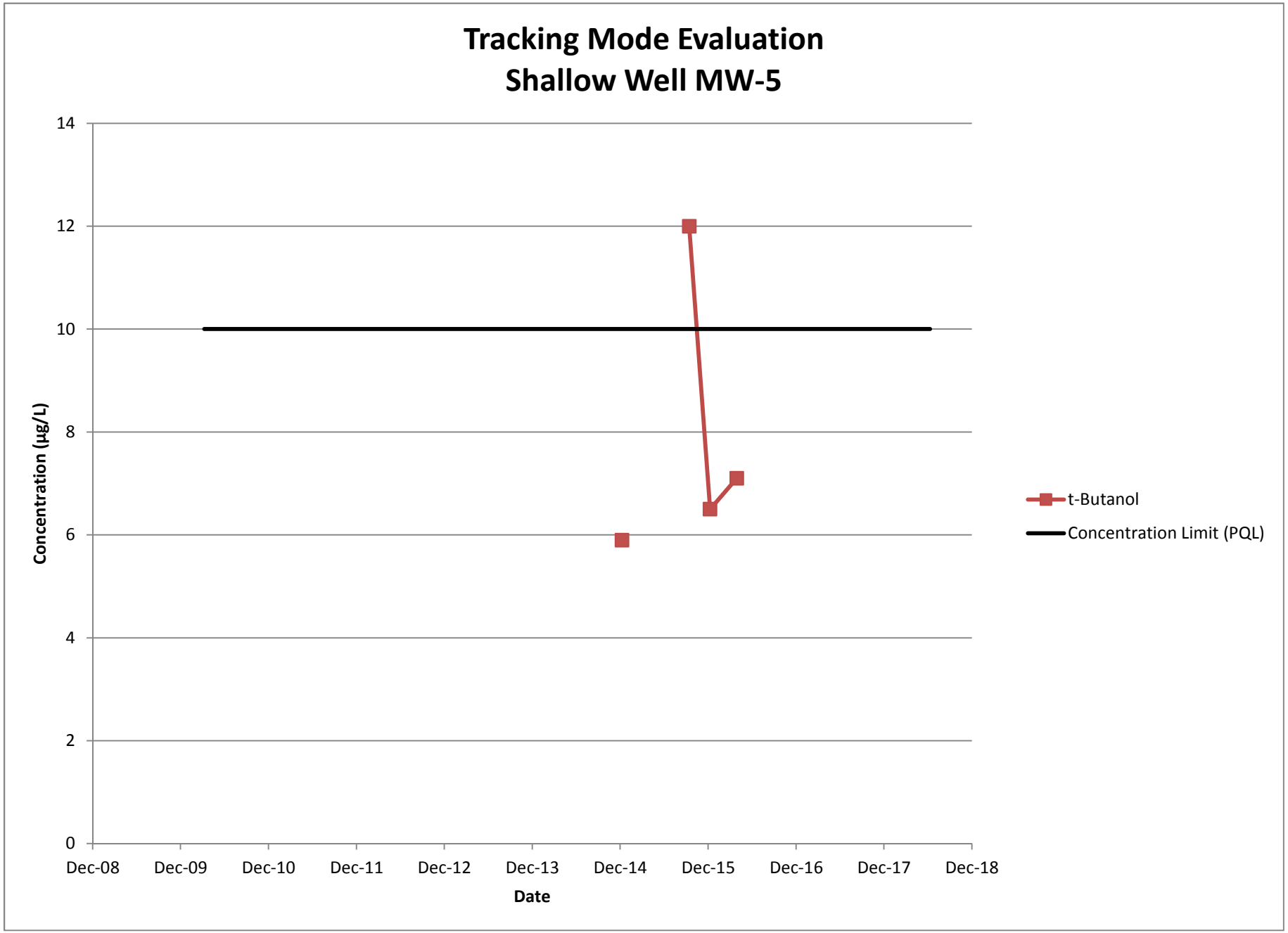
TRACKING MODE TRENDS

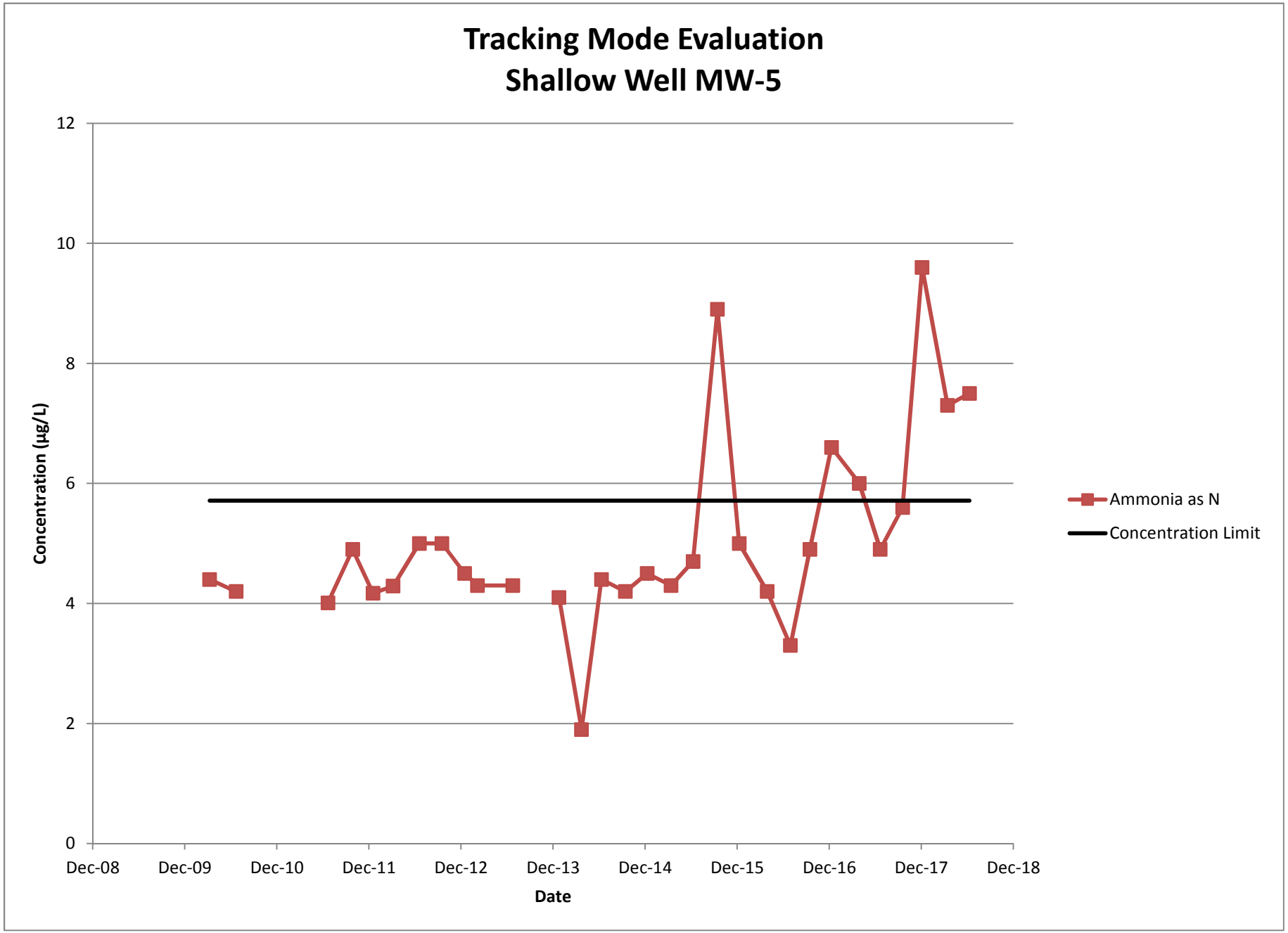
Geo-Logic ASSOCIATES

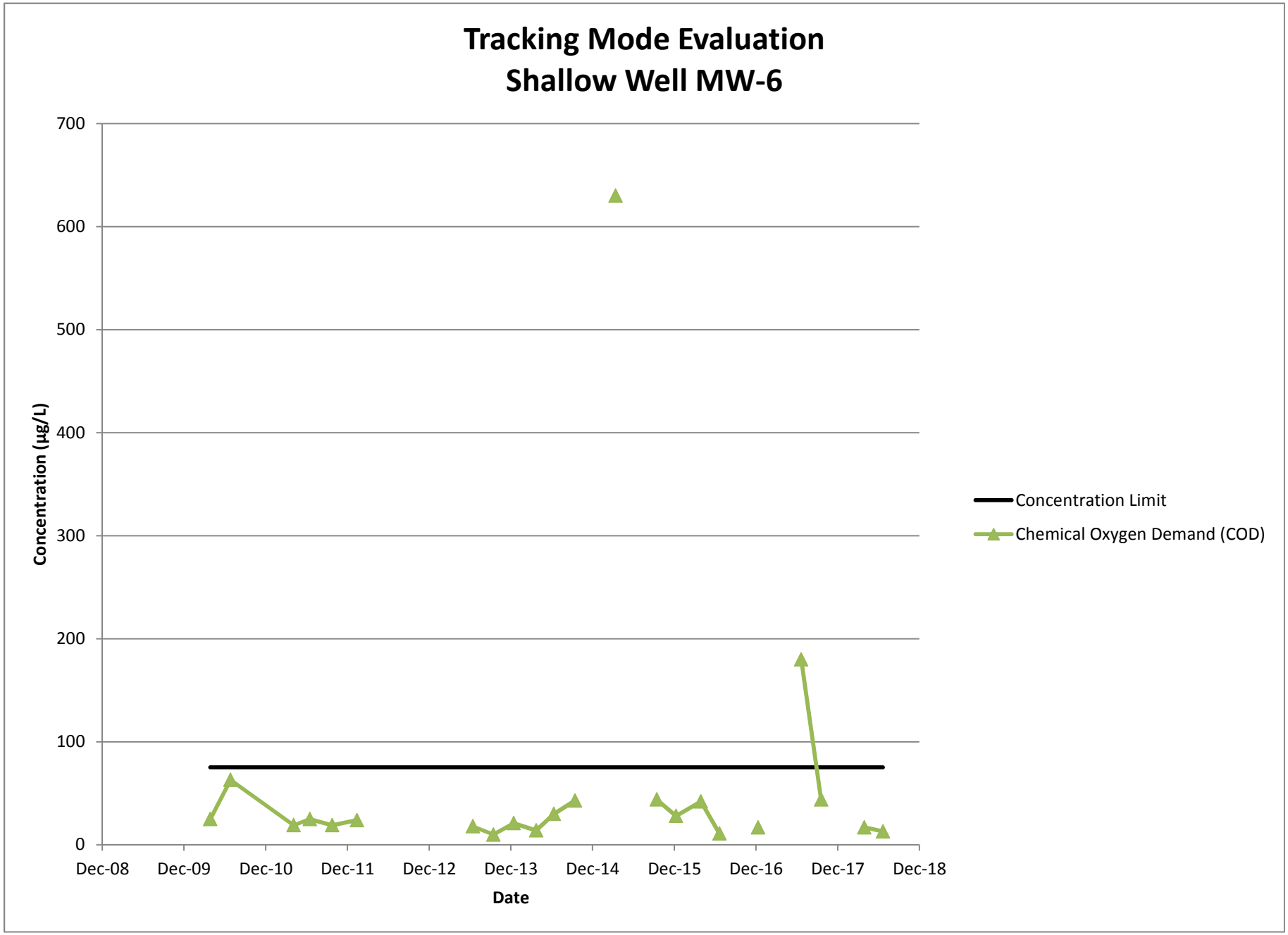

Tracking Mode Evaluation
Shallow Well MW-1
Concentration (µg/L)
30
25
20
15
10
5
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
1,4-Dioxane
Concentration Limit (PQL)


Tracking Mode Evaluation
Shallow Well MW-1
Concentration (ug/L)
25
20
15
10
5
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
t-Butanol
Concentration Limit (PQL)


Tracking Mode Evaluation
Shallow Well MW-5
Concentration (µg/L)
25
20
15
10
5
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
1,4-Dioxane
Concentration Limit (PQL)


Tracking Mode Evaluation
Shallow Well MW-5
Concentration (µg/L)
14
12
10
8
6
4
2
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
t-Butanol
Concentration Limit (PQL)


Tracking Mode Evaluation
Shallow Well MW-5
Concentration (µg/L)
12
10
8
6
4
2
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Ammonia as N
Concentration Limit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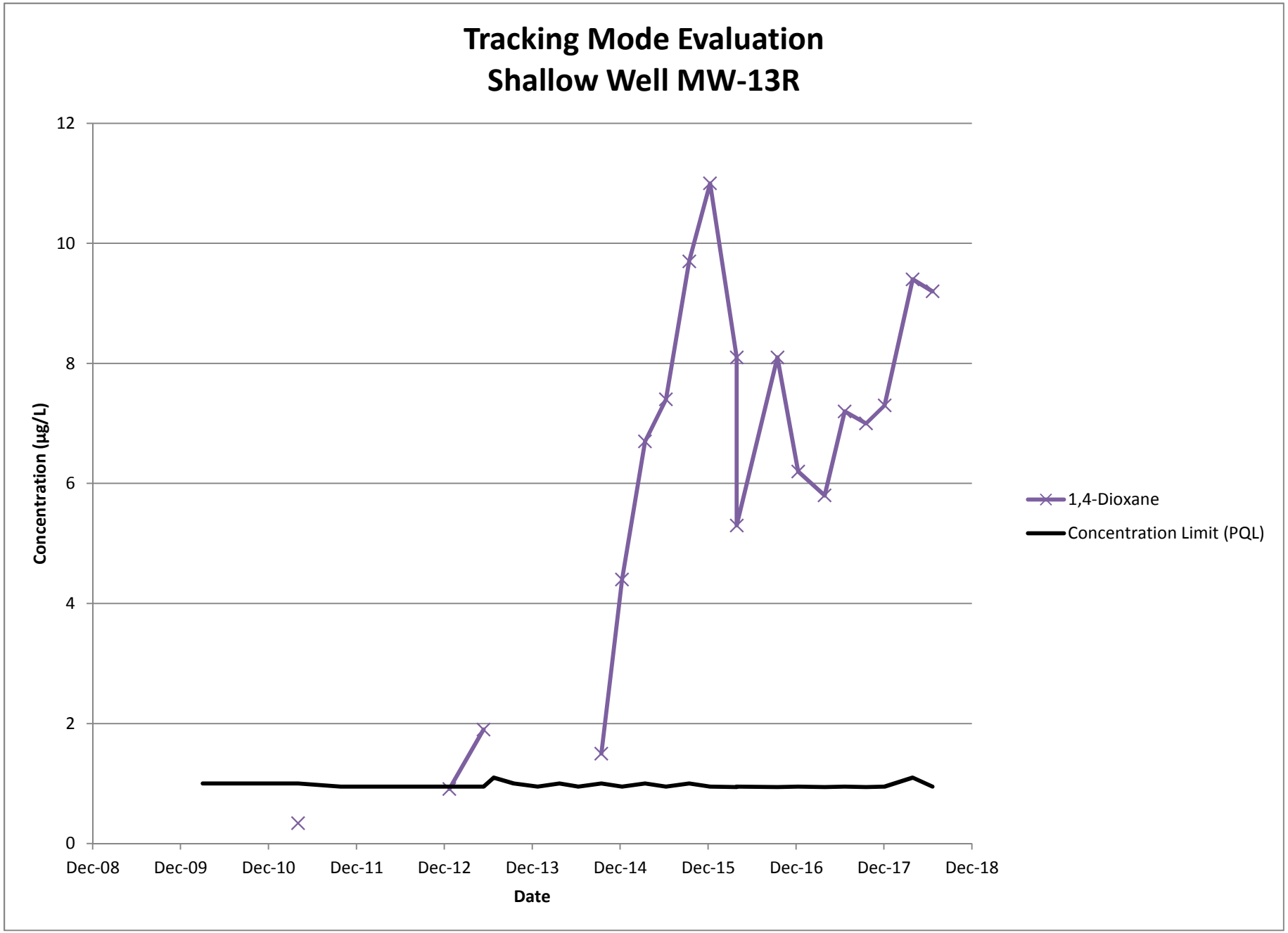
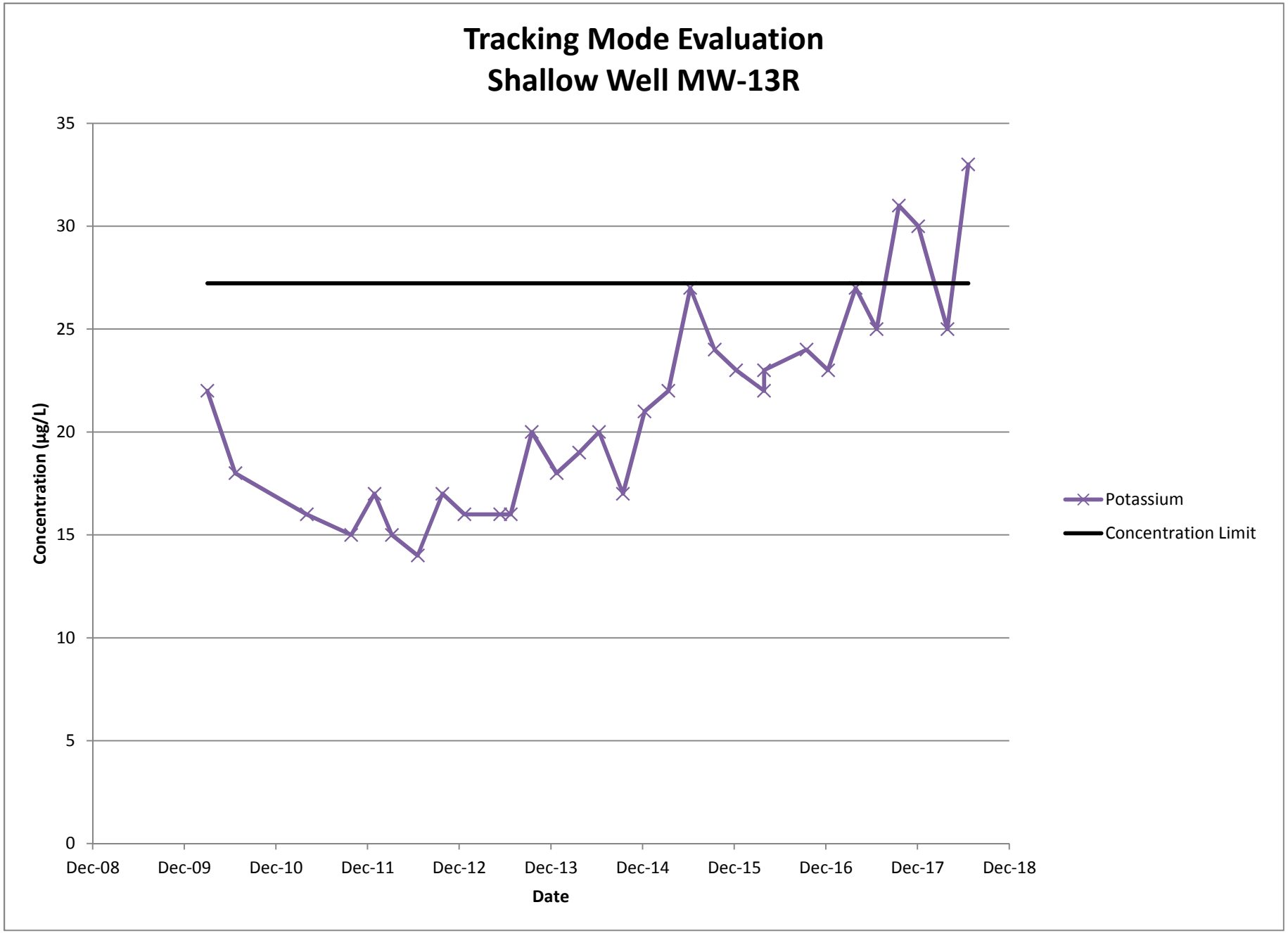
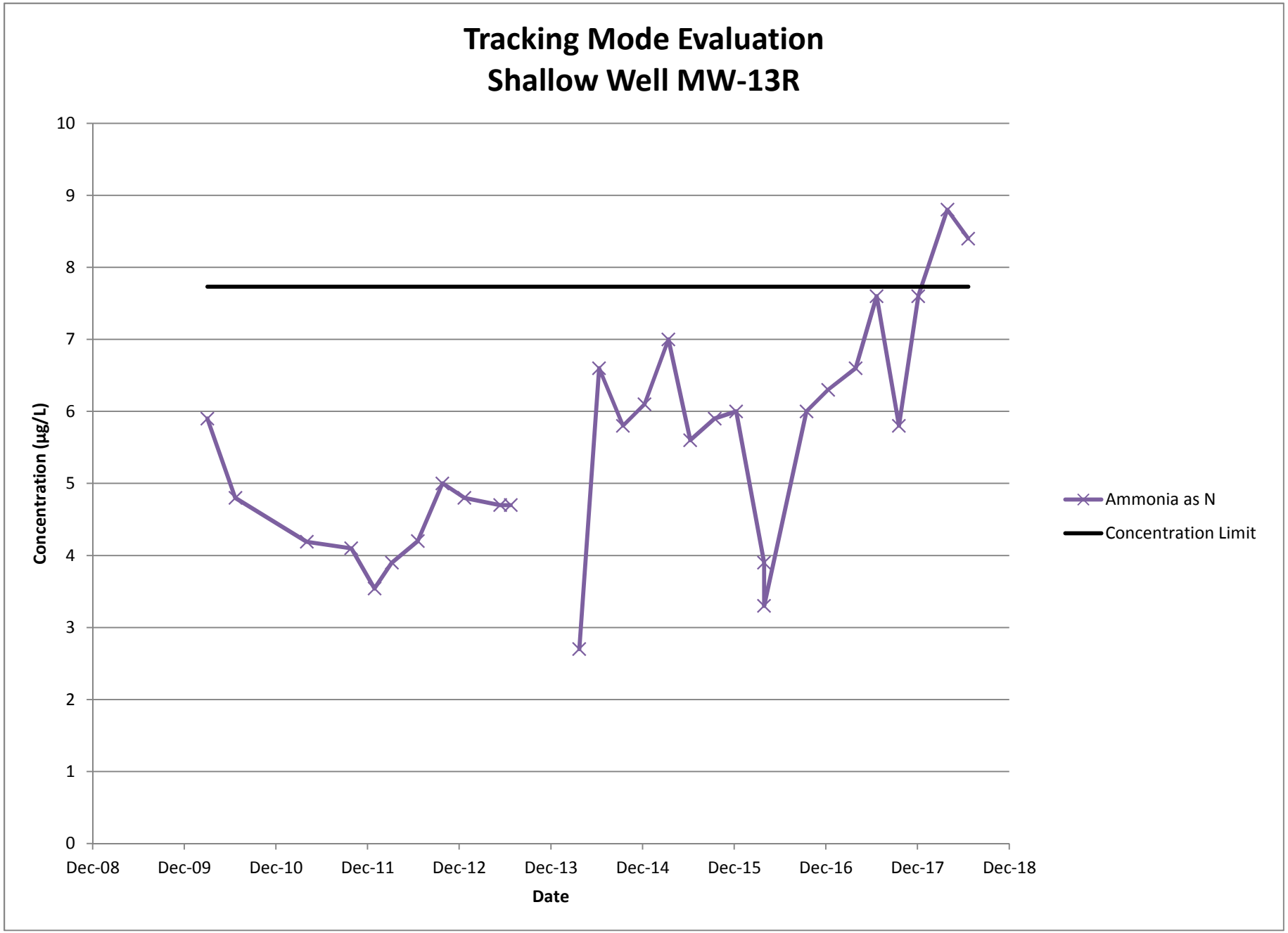
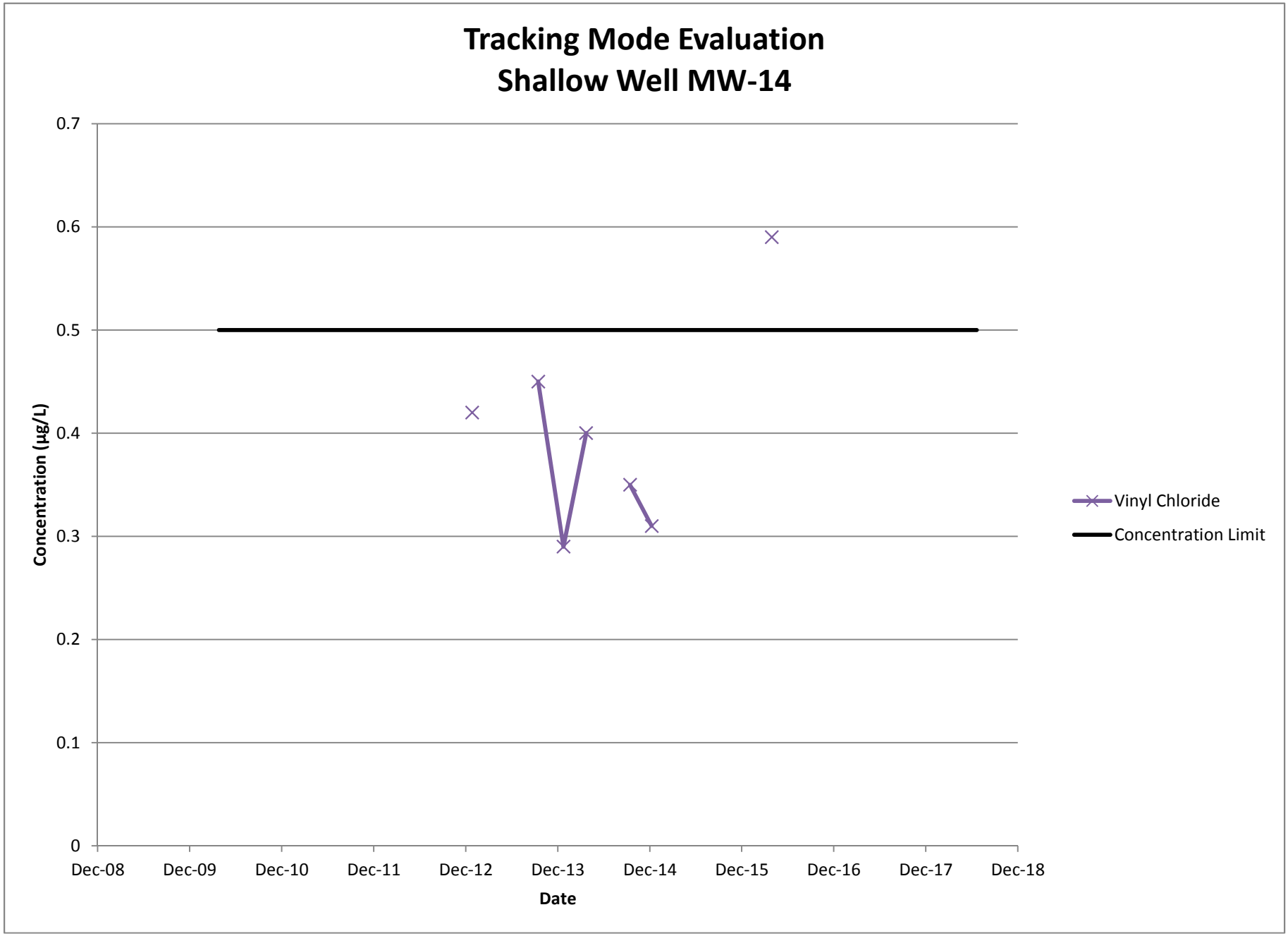
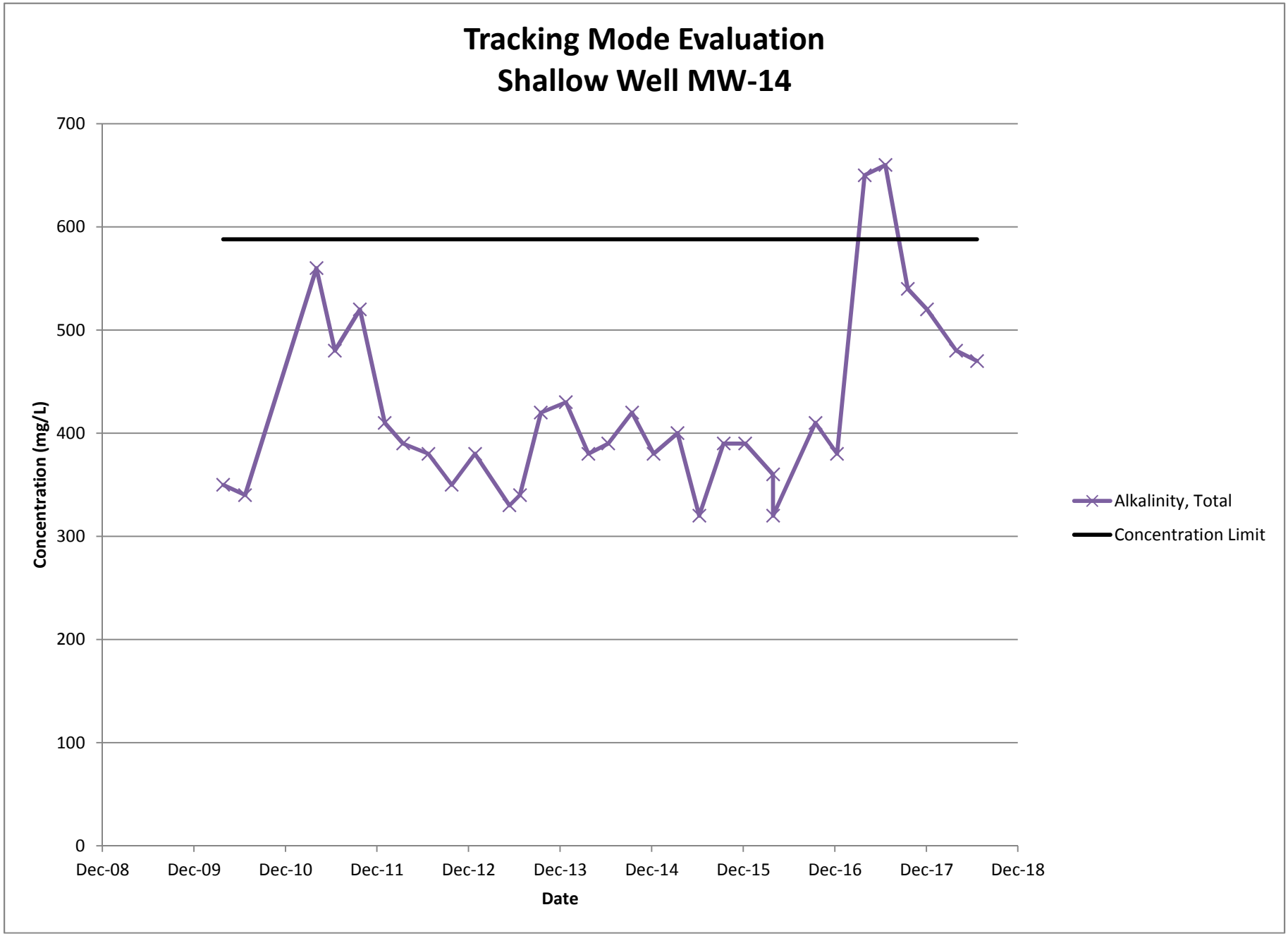
Shallow Well MW-6
700
600
500
400
300
200
100
0
Concentration (µg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Concentration Limit
Chemical Oxygen Demand (COD)

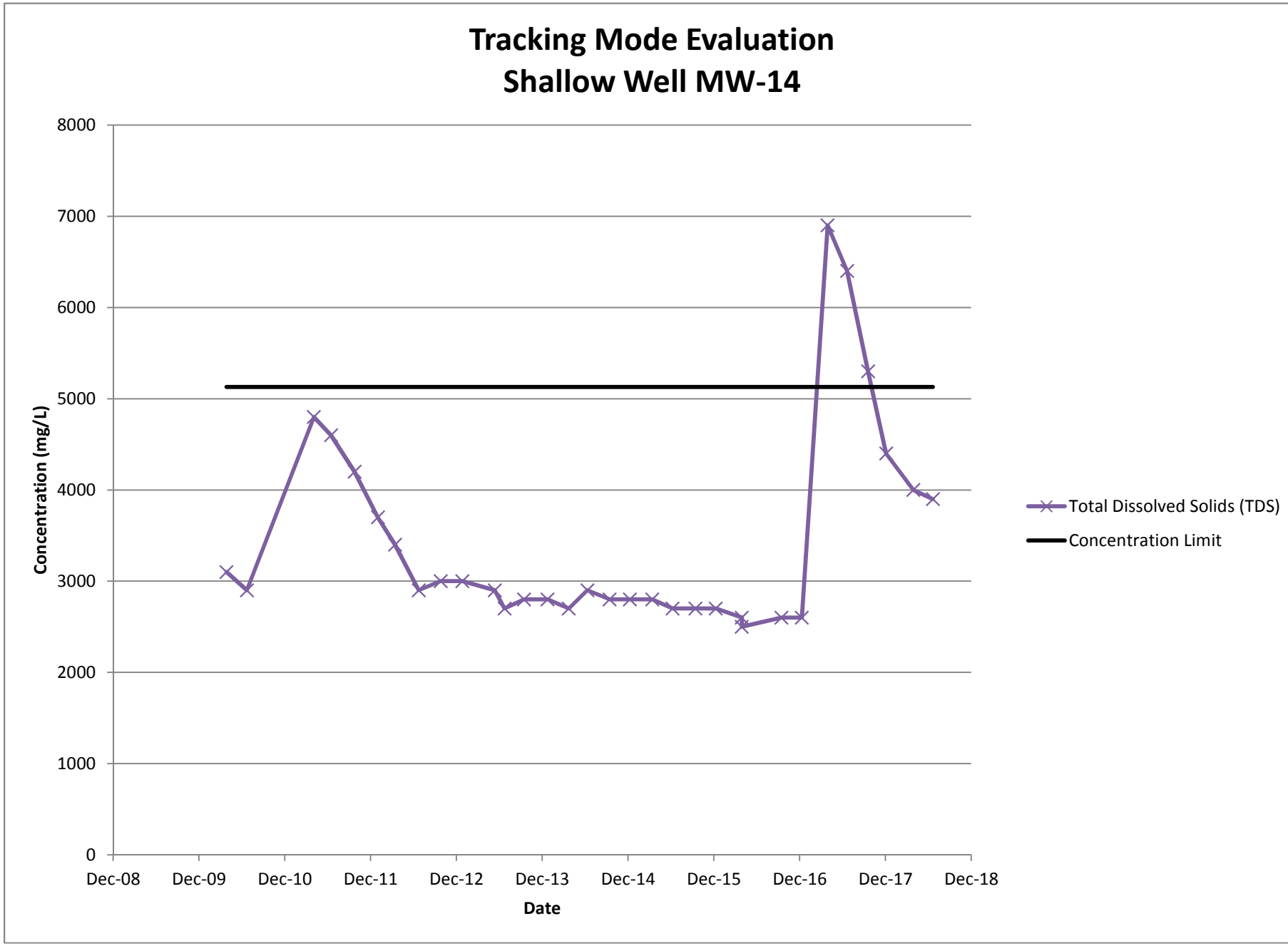

Tracking Mode Evaluation
Shallow Well MW-13R
Concentration (µg/L)
12
10
8
6
4
2
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
1,4-Dioxane
Concentration Limit (PQL)

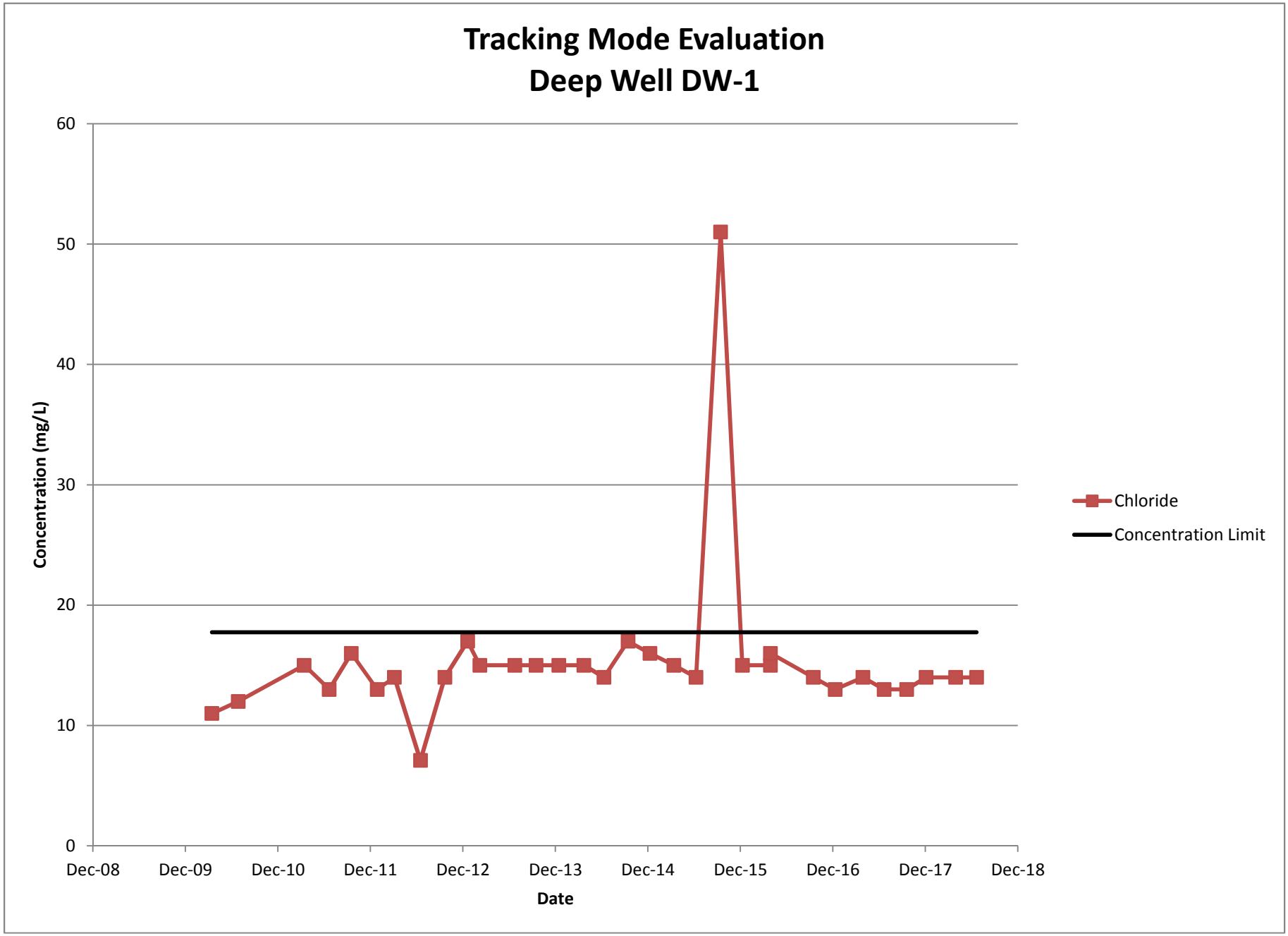

Tracking Mode Evaluation
Shallow Well MW-13R
Concentration (µg/L)
35
30
25
20
15
10
5
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Potassium
Concentration Limit

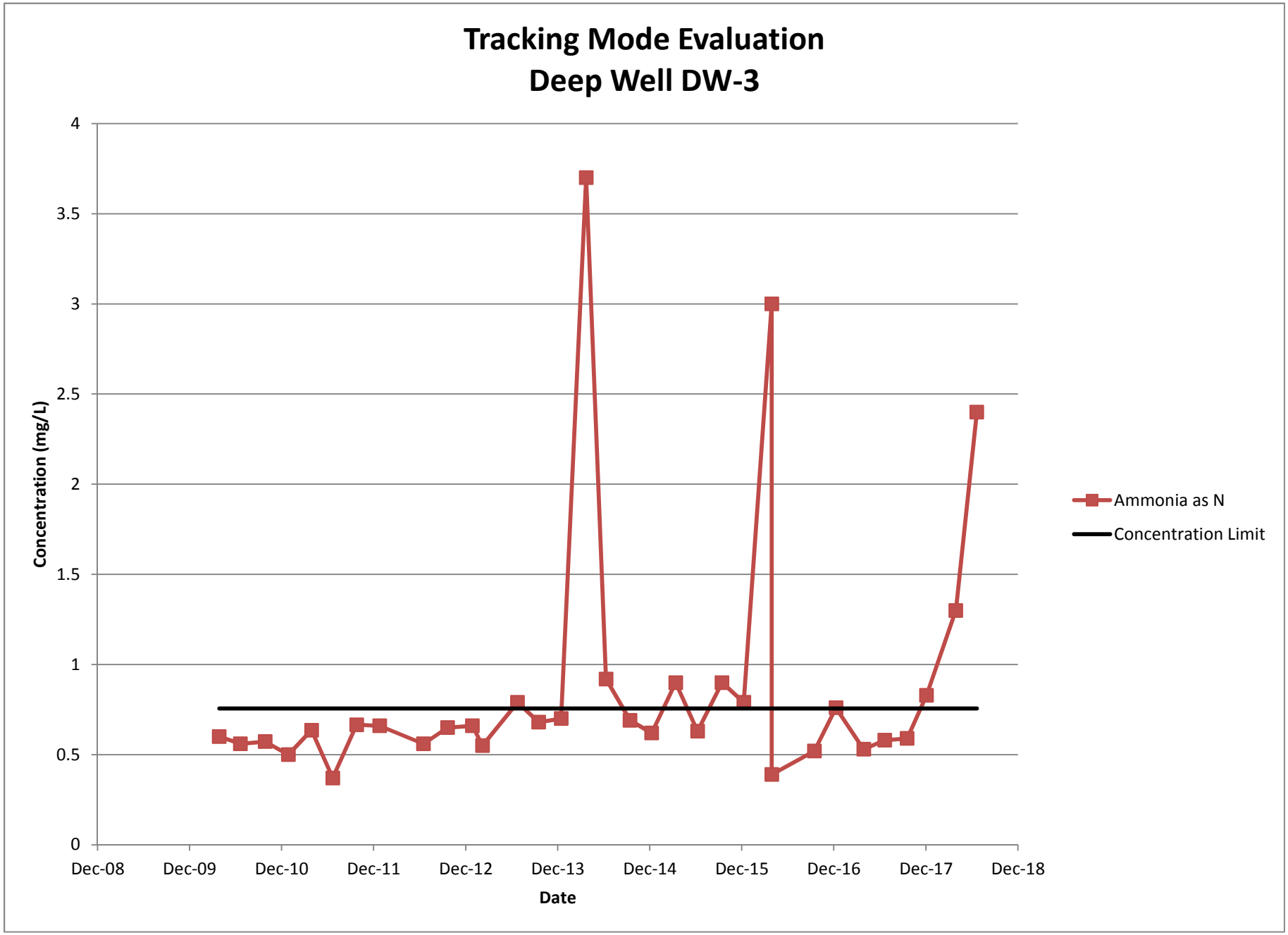

Tracking Mode Evaluation
Shallow Well MW-13R
Concentration (µg/L)
10
9
8
7
6
5
4
3
2
1
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Ammonia as N
Concentration Limit

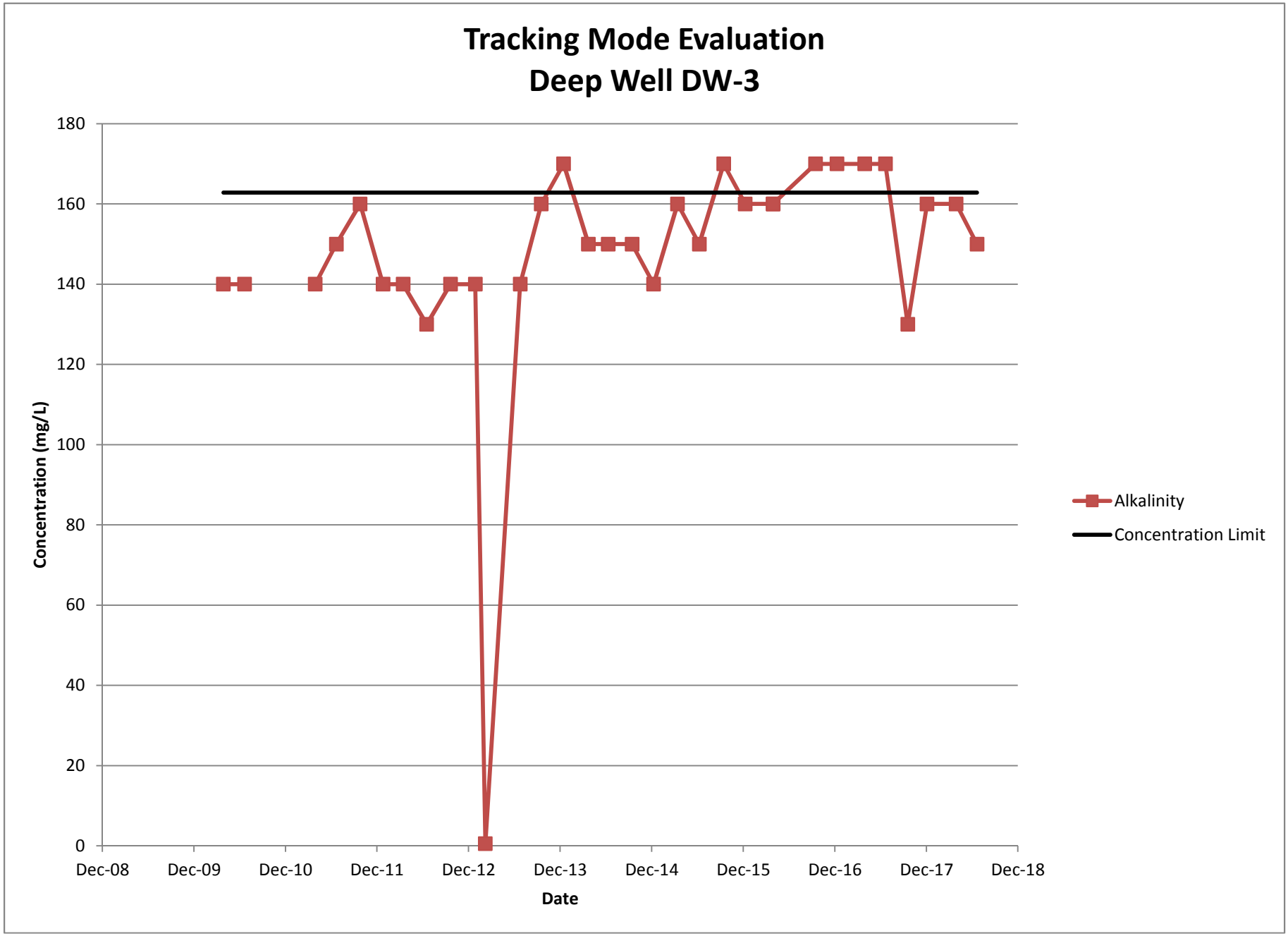

Tracking Mode Evaluation
Shallow Well MW-14
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Concentration (µg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Vinyl Chloride
Concentration Limit

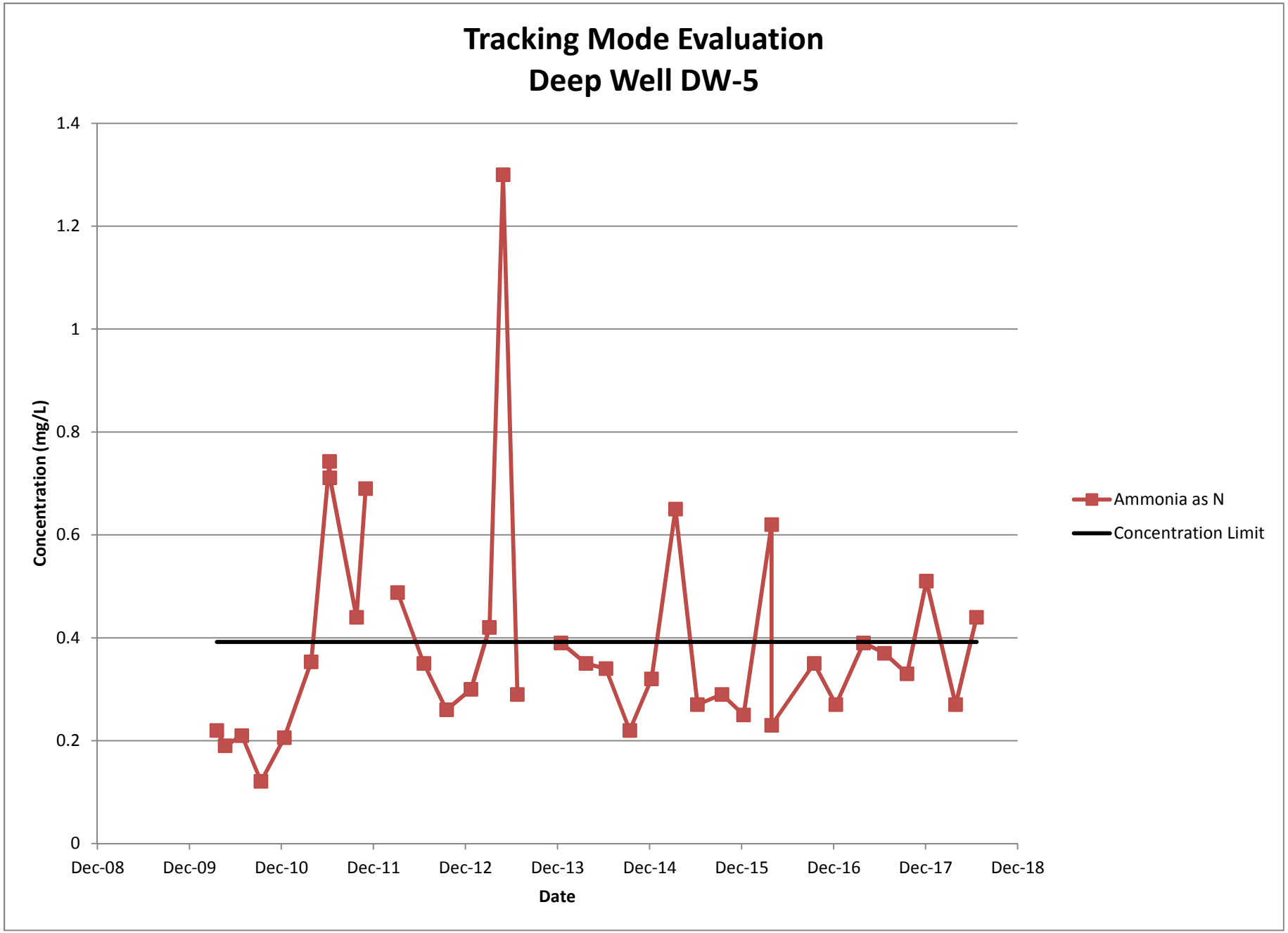

Tracking Mode Evaluation
Shallow Well MW-14
700
600
500
400
300
200
100
0
Concentration (mg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Alkalinity, Total
Concentration Limit

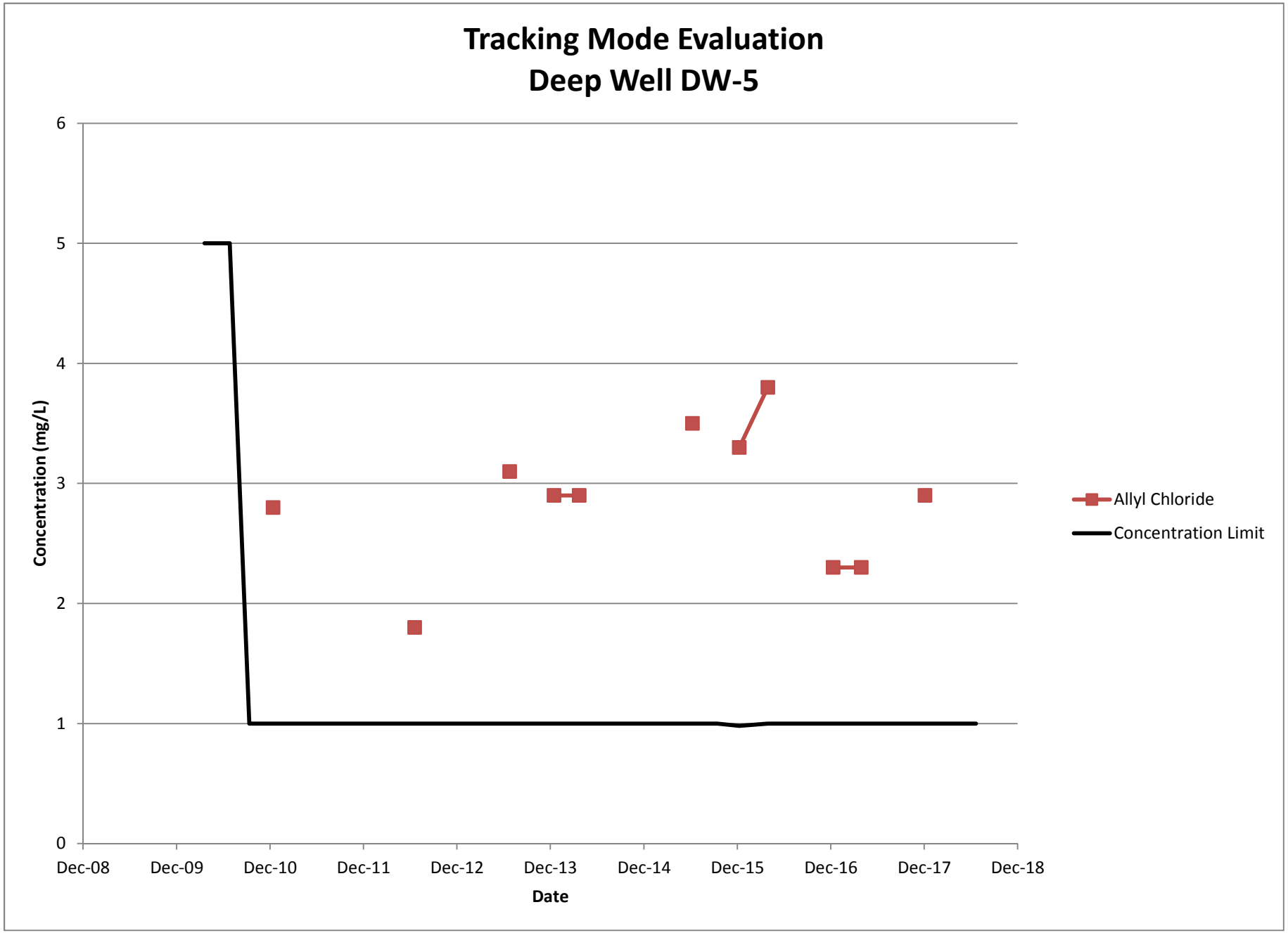

Tracking Mode Evaluation
Shallow Well MW-14
8000
7000
6000
5000
4000
3000
2000
1000
0
Concentration (mg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Total Dissolved Solids (TDS)
Concentration Limit

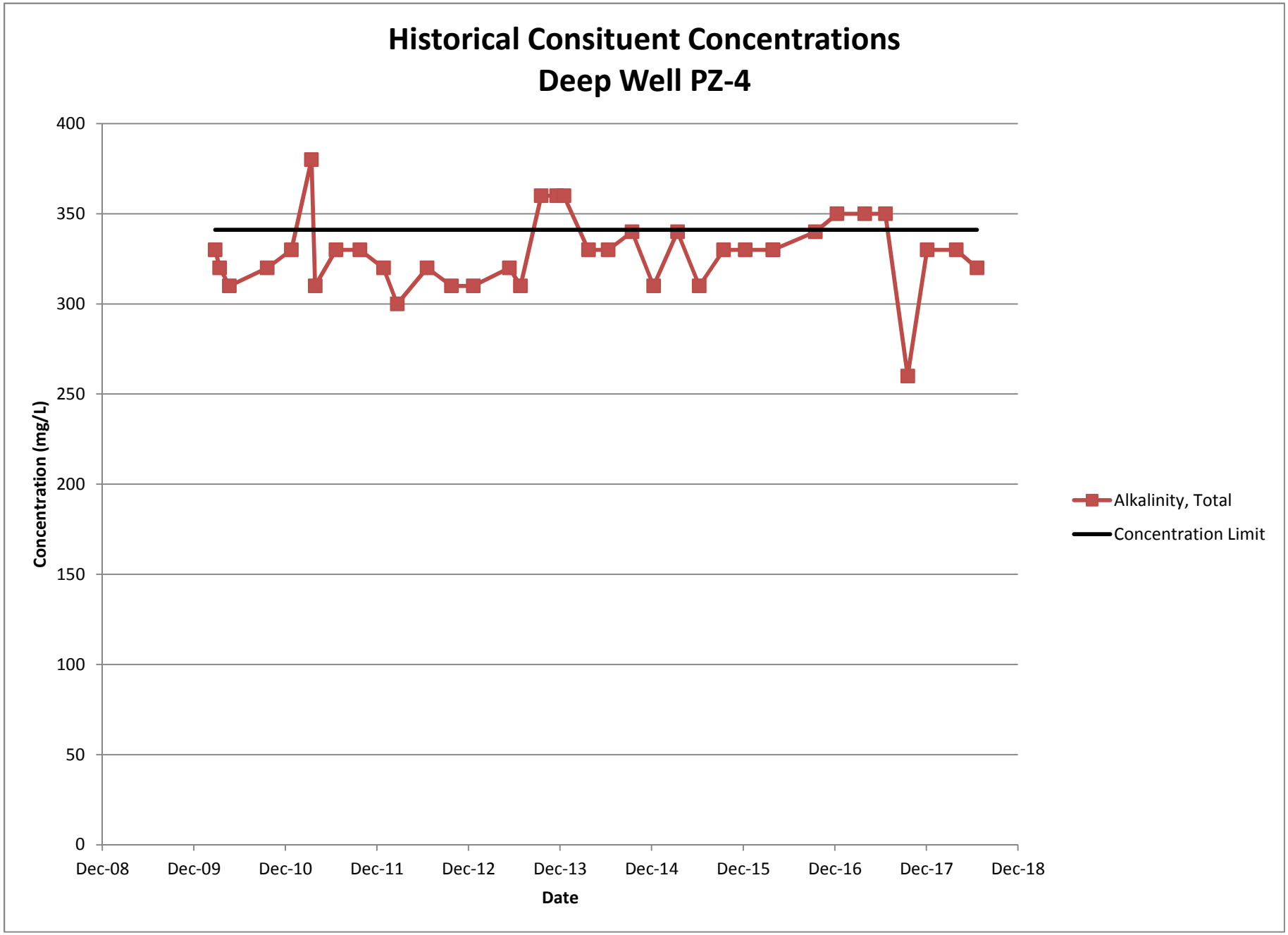

Tracking Mode Evaluation
Deep Well DW-1
60
50
40
30
20
10
0
Concentration (mg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Chloride
Concentration Limit

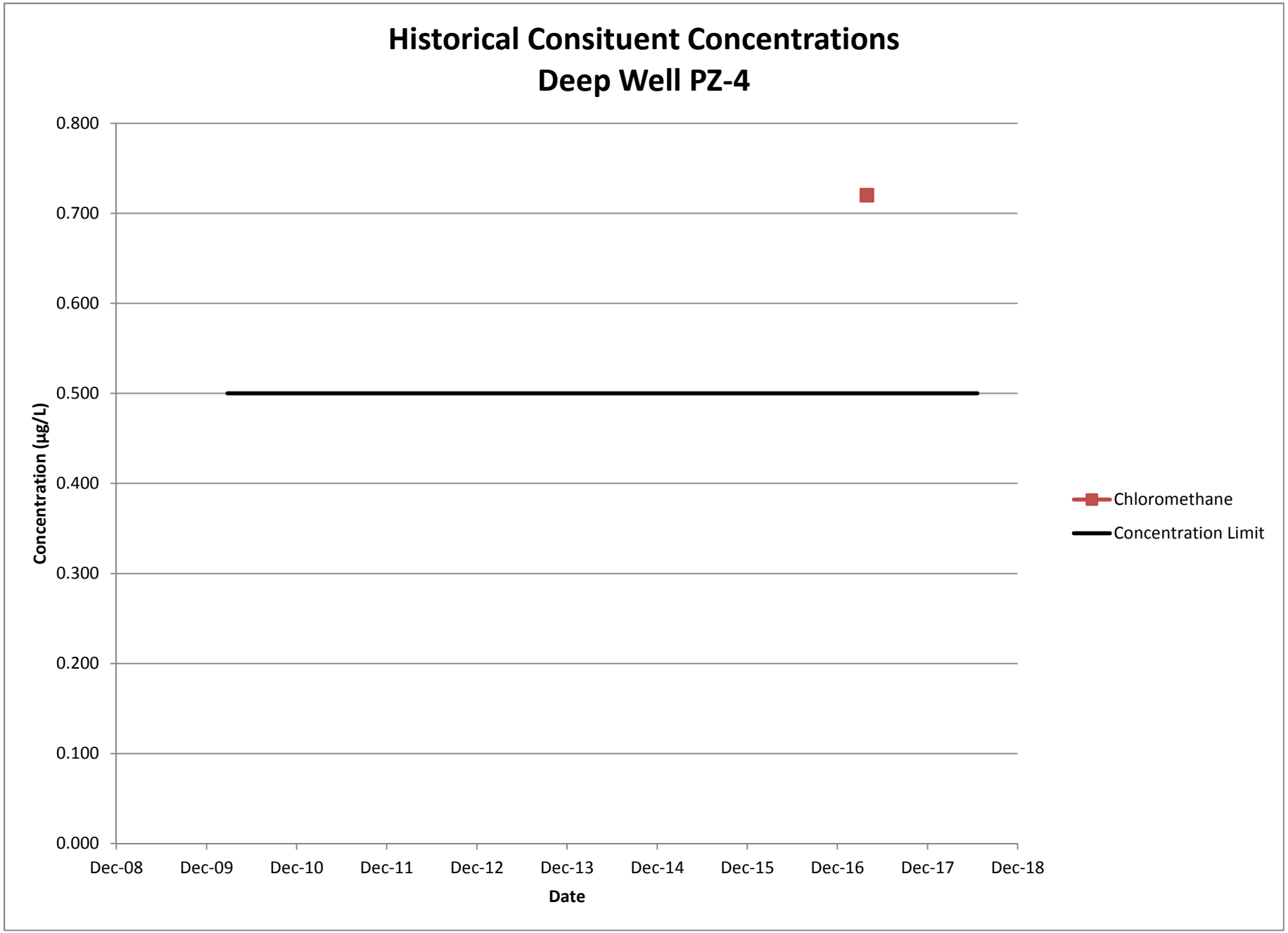

Tracking Mode Evaluation
Deep Well DW-3
Concentration (mg/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Ammonia as N
Concentration Limit


Tracking Mode Evaluation
Deep Well DW-3
180
160
140
120
100
80
60
40
20
0
Concentration (mg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Alkalinity
Concentration Limit


Tracking Mode Evaluation
Deep Well DW-5
Concentration (mg/L)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Ammonia as N
Concentration Limit


Tracking Mode Evaluation
Deep Well DW-5
Concentration (mg/L)
0
1
2
3
4
5
6
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Allyl Chloride
Concentration Limit


Historical Consituent Concentrations
Deep Well PZ-4
400
350
300
250
200
150
100
50
0
Concentration (mg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Alkalinity, Total
Concentration Limit


Historical Consituent Concentrations
Deep Well PZ-4
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Concentration (µg/L)
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Date
Chloromethane
Concentration Limit