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January 19, 2016

2013-2993-20

Mr. Peter Ruttan
California Dept. of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200

RE: 2015 LA River Sampling
Non-Residential Dust and Dirt Sampling
Exide Technologies, Vernon, California

Dear Mr. Ruttan:

As part of the Non-Residential Dust and Dirt Sampling implemented in 2015, Advanced GeoServices, on behalf of Exide Technologies, conducted sediment sampling in the Los Angeles River. This letter summarizes the sediment sampling information which will be presented in the forthcoming Interim Non-Residential Dust and Dirt Sampling Report.

Sampling was conducted in accordance with the *Revised Non-Residential Dust and Dirt Sampling Plan* dated June 12, 2015 and subsequent revisions requested by DTSC.

Preparation

Access to the LA River in the vicinity of the site is controlled by U.S. Army Corps of Engineers (USACE). On August 6, 2015, USACE approval for access was received. Entry to the area downstream of South Atlantic Boulevard was performed by driving into the concrete channel of the river via an access ramp located at South Downey Road.

Sampling

LA River sediment samples were collected at 30 locations selected with input from DTSC at distances ranging from 2,629 to 3,194 feet downstream of the South Atlantic Boulevard Bridge. Sampling was performed on August 11, 2015 and was observed by DTSC. Samples were field located to coincide with areas of observed sediment accumulation between or immediately downstream of the Bandini Boulevard storm drain discharge and the low flow center line channel in the LA River. Sampling was performed following the general procedures for sample collection and handling described in the Phase 5 RFI Work Plan utilized for sediment sampling in October 2011. Similar to Phase 5 RFI sampling, when saturated sediments were encountered the interstitial water was sampled, lab filtered using a 45 micron filter and analyzed. Sample locations for the 2015 LA River sediment sampling are shown on Figure 1. Sample areas for the Phase 5 RFI and 2015 LA River sediment sampling are shown on Figure 2.

Samples were analyzed for CAM-17 metals plus aluminum, sulfate and total organic carbon. All samples were analyzed by Test America Laboratories in Irvine, California. Results are provided in the data validation reports attached in Appendix A. Boring logs are presented in Appendix B.

Sediment samples were evaluated by calculating the 95% UCL of the mean and comparing the 95% UCL against the National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRT) Toxic Effects Concentration (TECs) for freshwater sediment, or the Freshwater Sediment Screening Benchmarks (FSSB) (USEPA Region III BTAG, July 2006) when a SQuiRTs TEC value did not exist. All UCL calculations were performed using Pro UCL, a comprehensive statistical software package developed by USEPA. 95% UCL for sediment samples are presented in Table 1.

Sample statistics as presented on Table 1 were performed exclusive of sample P-113 because initial lead result for P-113 were 9,300 mg/kg, but when re-tested produced values of 25 mg/kg, 29 mg/kg, and 1,500 mg/kg. The decision to exclude the sample in its entirety was based on the fact that the 9,300 mg/kg could not be reproduced even after three re-tests and the 9,300 mg/kg represents a statistical outlier relative to the other 29 sample locations. If the statistics were performed utilizing the 9,300 mg/kg result, the 95% UCL for lead would have been 1,635 mg/kg. If sample statistics were performed using the 1,500 mg/kg instead of the 9,300 mg/kg, the 95% UCL for lead would be approximately 215 mg/kg. A calculation demonstrating P-113 is an outlier is provided in Appendix D.

Pore water results were compared to NOAA SQuiRTs TEC values for chronic surface freshwater exposures. Pore water sample 95% UCL and results are presented in Tables 2 and 3, respectively.

Field testing for EH and pH was performed on surface water at the Bandini Boulevard storm drain culvert discharge, within the ponded standing water below the culvert, and at four locations within the low flow center channel in the LA River between 2,600 feet and 3,237 feet east of the South Atlantic Blvd bridge. Surface water was analyzed using a QED MP-20 Flow Through Cell. The results are shown on Table 4.

Evaluation of Results - Sediment

As shown in Table 1 an arithmetic mean and the 95% UCL of the mean was calculated for each metal analyzed for the LA River sediment samples (excluding sample P-113) with the exception of thallium. A 95% UCL was not calculable as thallium was only detected in two LA River sediment samples. The 95% UCL of the mean for aluminum, antimony, arsenic, chromium, cobalt, mercury, nickel, selenium, and silver were less than their corresponding SQuiRT TEC/FSSL values. The 95% UCLs for barium, beryllium, molybdenum, and vanadium were calculated although no SQuiRT TEC/FSSL values exist for these metals. The 95% UCLs for cadmium, copper, lead and zinc were greater than their corresponding SQuiRT TEC/FSSL values.

The copper 95% UCL of 96.18 mg/kg was above the SQuiRT TEC of 31.6 mg/kg. The zinc 95% UCL of 423.8 mg/kg was above the SQuiRT TEC of 121 mg/kg. The cadmium 95% UCL of 1.378 mg/kg exceeded the SQuiRT TEC of 0.99 mg/kg.

The highest lead result observed in sediment samples was 9,300 mg/kg in P-113. The next highest lead result was 440 mg/kg in sample P-111. Advanced GeoServices requested that the laboratory re-homogenize the remaining P-113 archived sample material, split the sample into three (3) subsamples and re-analyze. This additional analysis was based on this relative difference in the two highest lead sample results as well as the apparent sample heterogeneity in the sample material collected at P-113 (see Appendix C for photo of sample area). The results of the three (3) subsamples were 25 mg/kg, 29 mg/kg and 1,500 mg/kg. As stated above, because the initial result of 9,300 mg/kg could not be reproduced and the heterogeneity of the sample, statistics were performed excluding sample P-113.

Evaluation of Results - Pore Water

The LA River sediment samples collected at locations P-102, P-112, P-118, P-119, P-122, P-126 and P-127 were saturated at the time of collection. Pore water from these sediment samples was separated by the laboratory via a centrifuge, filtered and analyzed for CAM-17 metals, aluminum, and sulfate. The 95% UCL was calculated for each of the metals with the exceptions of beryllium, cadmium, mercury, silver and thallium as there were not enough data points to calculate a 95% UCL for these metals. The 95% UCLs that could be calculated were compared to the NOAA SQuiRT TEC values for chronic surface freshwater exposures.

LA River pore water sample results are presented in Table 3. The associated pore water summary statistics are presented in Table 2. As shown in Table 3, barium (7 results), cadmium (1 result), cobalt (1 result), copper (4 results), lead (2 results), molybdenum (3 results), selenium (1 results) and thallium (2 result) all had individual sample results that exceeded the SQuiRT chronic surface freshwater exposure TEC values. Of these metals, the 95% UCLs for barium, cobalt, copper, molybdenum and selenium exceeded the SQuiRT chronic surface freshwater exposure TEC values.

Evaluation of Results - Field Testing

The results of the surface water sampling performed at the Bandini Boulevard storm drain culvert discharge, within the ponded standing water below the culvert, and at four locations within the low flow center channel in the LA River between 2,600 feet and 3,237 feet east of the South Atlantic Boulevard bridge are shown on Table 4. EH was observed to range from 161.0 mV to 163.9 mV, with a mean value of 162.2 mV. The pH values range from 8.64 to 9.33, with a true mean of 9.03.

eH and pH values were consistent within the sample set.

Please contact Jen DiJoseph at (610) 840 9189 or Paul Stratman at (610) 840 9122 with any questions.

Sincerely,

ADVANCED GEOSERVICES

Jennifer W. DiJoseph
Project Consultant

Paul G. Stratman, P.E.
Consultant 1/19/16

REGISTERED PROFESSIONAL ENGINEER
PAUL GERARD STRATMAN
NO. C61595
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CIVIL
STATE OF CALIFORNIA

cc: T. Strang
J. Hogarth
D. Henke

TABLES

TABLE 1
SEDIMENT SAMPLE STATISTICS SUMMARY
(Excluding Sample P-113)
2015 Los Angeles River Sediment Sampling
Exide Technologies
Vernon, California

Parameter	Units	TEC/FSSL	2015 Downstream Sample Results Arithmetic Mean	2015 Downstream Sample Results 95% UCL	Results Above TEC/FSSL
Aluminum	mg/kg	NA	5934	9940	NA
Antimony	mg/kg	2	0.864	2.005	1
Arsenic	mg/kg	9.8	3.154	4.814	0
Barium	mg/kg	NA	118.3	146.9	NA
Beryllium	mg/kg	NA	0.319	0.431	NA
Cadmium	mg/kg	0.99	0.795	1.378	7
Chromium	mg/kg	43.4	18.75	24.41	1
Cobalt	mg/kg	50.0	4.741	5.561	0
Copper	mg/kg	31.6	75.03	96.18	23
Lead	mg/kg	35.8	89.4	128.8	21
Mercury	mg/kg	0.18	0.108	0.140	3
Molybdenum	mg/kg	NA	2.071	2.72	NA
Nickel	mg/kg	22.7	14.16	18.38	7
Selenium	mg/kg	2	0.699	0.990	0
Silver	mg/kg	1	0.356	0.503	2
Thallium	mg/kg	NA	0.265	NA	NA
Vanadium	mg/kg	NA	22.76	26.95	NA
Zinc	mg/kg	121	274.5	423.8	18

NOTES:
1. * Samples statistics do not include sample P-113 or QA/QC samples
2. Mean - Mean calculated using detected results only
3. FSSL - USEPA Freshwater Sediment Screening Level
4. TEC - Toxic Effects Concentration from NOAA Screening Quick Reference Table for Inorganics in Sediment
5. NA - Not applicable
6. ND - Non-detect
7. mg/kg - Milligrams per Kilogram
8. Shading indicates exceedance of TEC/FSSL

TABLE 2
PORE WATER SAMPLE STATISTICS SUMMARY
2015 Los Angeles River Sediment Sampling
Exide Technologies
Vernon, California

Parameter (Dissolved)	Units	NOAA SQuiRT Surface Freshwater Chronic Exposure TEC Value	Sample Results 95% UCL	Results Above TEC Value
Aluminum	µg/L	NA	42.53	NA
Antimony	µg/L	30	3.633	0
Arsenic	µg/L	150	12.35	0
Barium	µg/L	3.9	148	7
Beryllium	µg/L	0.66	NA	0
Cadmium	µg/L	0.25	NA	1
Chromium	µg/L	11	2.39	0
Cobalt	µg/L	3	3.161	1
Copper	µg/L	9	77.85	4
Lead	µg/L	2.5	2.338	2
Mercury	µg/L	0.77	ND	0
Molybdenum	µg/L	34	42.88	2
Nickel	µg/L	52	19.02	0
Selenium	µg/L	5	6.466	1
Silver	µg/L	0.36	NA	0
Thallium	µg/L	0.03	NA	2
Vanadium	µg/L	19	6.746	0
Zinc	µg/L	120	44.47	0

* Samples statistics do not include duplicate samples
Mean - Mean calculated using detected results only
NA - Not applicable
ND - Non-detect
µg/L - Micrograms per Liter
Shading indicates exceedance of TEC

TABLE 3
PORE WATER SAMPLE RESULTS
2015 Los Angeles River Sampling
Exide Technologies
Vernon, California

Sample Location			P-102W			P-112W			P-118W			P-118D-W			P-119W			P-122W			P-126W			P-127W			P-127D-W		
Lab ID			440-117992-04			440-117992-15			440-117992-22			440-117992-41			440-117992-24			440-117992-28			440-117992-33			440-117992-35			440-117992-39		
Sample Date		CEV	8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix			Pore Water			Pore Water			Pore Water			Pore Water			Pore Water			Pore Water			Pore Water			Pore Water			Pore Water		
Remarks												FD of P-118W															FD of P-127W		
Parameter	**Units**		**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Dissolved Metals																													
Aluminum, Dissolved	ug/L	NA	48	J	25	21		10	11	J	10	41	J	10		U	25	40	J	25	18	J	10		U	25		U	25
Antimony, Dissolved	ug/L	30	3.5		1	0.9	J	0.4	0.92	J	0.4	1.4		0.4	2.1	J	1	5		1	1.1		0.4		U	1		U	1
Arsenic, Dissolved	ug/L	150	5.2		0.5	17		0.2	8.9		0.2	11		0.2	8.9		0.5	7.4		0.5	6.8		0.2	12		0.5	15		0.5
Barium, Dissolved	ug/L	3.9	58		0.5	110		0.2	78	J	0.2	50	J	0.2	170		0.5	170		0.5	98		0.2	130	J	0.5	54	J	0.5
Beryllium, Dissolved	ug/L	0.66		U	0.5	0.25	J	0.2		U	0.2		U	0.2		U	0.5		U	0.5		U	0.2	0.52	J	0.5		U	0.5
Cadmium, Dissolved	ug/L	0.25	0.3	J	0.25	0.29		0.1		U	0.1		U	0.1		U	0.25		U	0.25		U	0.1		U	0.25		U	0.25
Chromium, Dissolved	ug/L	11		U	1.3	1.5		0.5	0.78	J	0.5	1.1		0.5	1.4	J	1.3	1.6	J	1.3	3.3		0.5	1.6	J	1.3	10	J	1.3
Cobalt, Dissolved	ug/L	3		U	0.5	4.7		0.2	1.7		0.2	2.2		0.2	2.1		0.5	1.4		0.5	0.6		0.2	1.5		0.5	1.8		0.5
Copper, Dissolved	ug/L	9	60		1.3	59		0.5	7.2	J	0.5	11	J	0.5	5.4		1.3	140		1.3	10		0.5	4.9		1.3	6.2		1.3
Lead, Dissolved	ug/L	2.5	0.99		0.25	2.7		0.1	2		0.1	2.4		0.1	2.7		0.25	2		0.25	0.52		0.1	0.9		0.25	1.3		0.25
Mercury, Dissolved	mg/L	0.77		U	0.0001		U	0.0001		U	0.0001		U	1E-04		U	0.0001		U	0.0005		U	0.0001		U	0.0001		U	0.0001
Molybdenum, Dissolved	ug/L	34	8.6		0.5	15		0.2	22	J	0.2	36	J	0.2	34		0.5	71		0.5	9.3		0.2	29	J	0.5	53	J	0.5
Nickel, Dissolved	ug/L	52	6.8		0.75	24		0.3	12	J	0.3	23	J	0.3	17		0.75	22		0.75	5.1		0.3	5.7	J	0.75	9.3	J	0.75
Selenium, Dissolved	ug/L	5		UJ	1.5	7.1		0.6	3.3		0.6	4.1		0.6	1.5	J	1.5		UJ	1.5		UJ	0.6	2.3	J	1.5	4		1.5
Silver, Dissolved	ug/L	0.36		U	0.5	0.23	J	0.2		U	0.2		U	0.2		U	0.5		U	0.5		U	0.2		U	0.5		U	0.5
Thallium, Dissolved	ug/L	0.03		U	0.25	0.21		0.1		U	0.1		U	0.1		U	0.25		U	0.25		U	0.1	0.27	J	0.25		U	0.25
Vanadium, Dissolved	ug/L	19	6.5		0.5	4.7		0.2	5.9	J	0.2	12	J	0.2	7.3		0.5	6		0.5	3.3		0.2	6.6	J	0.5	9.8	J	0.5
Zinc, Dissolved	ug/L	120	25		10	54		4	24	J	4	45	J	4	22	J	10	61		10	9.4	J	4	15	J	10	20	J	10
Dissolved Conventionals																													
Sulfate, Dissolved	mg/L		83	J	13	140	J	13	140	J	13	210	J	13	65	J	13	120	J	13	53	J	13	47	J	13	110	J	13

CEV - Chronic Exposure Value from NOAA Screening Quick Reference table for Inorganics in Freshwate
ug/L - Micrograms per Lite
mg/L - milligrams per Lite
Q - Qualifier
MDL - Method Detection Limit
J - Estimated Detection
U - Not Detected
UJ - Estimated Non Detection
FD - Field Duplicate
Shading indicates exceedance of CEV

TABLE 4
SUMMARY OF FIELD EH AND pH MEASUREMENTS
SURFACE WATER
2015 Los Angeles River Sediment Sampling
Exide Technologies
Vernon, California

SAMPLE LOCATION/FEET EAST OF SOUTH ATLANTIC BLVD	EH (mV)	pH (units)
2600	161.8	9.28
2737	162.5	9.31
3100	161.7	9.32
3237	161.0	9.33
CULVERT DISCHARGE	163.9	8.64
PONDED STANDING WATER BELOW CULVERT	162.1	8.89

ARITHMETIC AVERAGE	162.2	NA
TRUE AVERAGE		9.03

FIGURES

LEGEND

P100 SAMPLE LOCATION

× APPROXIMATE LOCATION OF SURFACE WATER EH AND pH FIELD READINGS

GRAPHIC SCALE

0 25 50 100

(IN FEET)
1 INCH = 50 FT

EXIDE TECHNOLOGIES
VERNON, CALIFORNIA

2015 LA RIVER SEDIMENT SAMPLE LOCATIONS

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Sheet No.:	1 OF 1
Revision Number:	0

FIGURE 1

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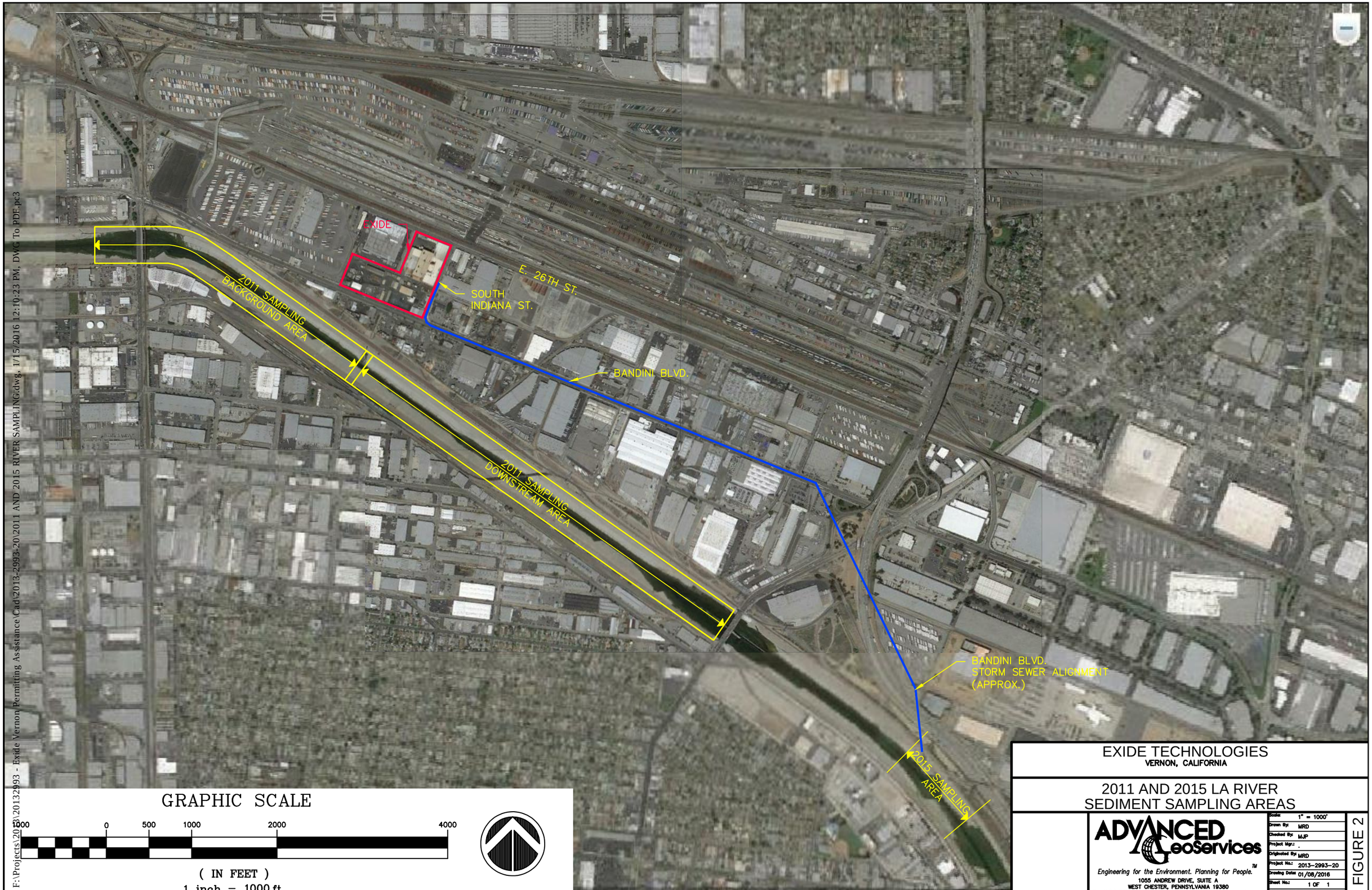

EXIDE TECHNOLOGIES
VERNON, CALIFORNIA

2011 AND 2015 LA RIVER
SEDIMENT SAMPLING AREAS

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FIGURE 2

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APPENDICES

APPENDIX A

EXIDE VERNON
NRDD Sediment Sampling, 8/11/15
TA Irvine# 440-117992 Project# 2013-2993

Sample Location		P-100			P-101			P-102			P-102W			P-103			P-104			P-105			P-106		
Lab ID		440-117992-01			440-117992-02			440-117992-03			440-117992-04			440-117992-05			440-117992-06			440-117992-07			440-117992-08		
Sample Date		8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix		Sediment			Sediment			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment			Sediment			Sediment			Sediment		
Remarks																									
Parameter	**Units**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Total Metals																									
Aluminum	mg/Kg	4300		25	8400		25	8700		25		NA		7200		25	4000		25	4000		25	3200		25
Antimony	mg/Kg	1.4	J	0.27	0.29	J	0.27		U	0.27		NA		0.47	J	0.27	0.27	J	0.27		U	0.27	0.42	J	0.27
Arsenic	mg/Kg	2.2		0.25	2.8		0.25	2.8		0.25		NA		3.3		0.25	3.8		0.25	1.8		0.25	2.8		0.25
Barium	mg/Kg	76	J	0.25	140	J	0.25	130	J	0.25		NA		110	J	0.25	80	J	0.25	80	J	0.25	83	J	0.25
Beryllium	mg/Kg	0.15	J	0.15	0.28	J	0.15	0.26	J	0.15		NA		0.16	J	0.15	0.23	J	0.15		U	0.15		U	0.15
Cadmium	mg/Kg	0.51		0.25	0.95		0.25	0.8		0.25		NA		1		0.25	0.33	J	0.25	0.37	J	0.25	0.26	J	0.25
Chromium	mg/Kg	14		0.5	17		0.5	16		0.49		NA		25		0.5	17		0.49	8		0.5	12		0.49
Cobalt	mg/Kg	3.6		0.21	5.7		0.21	5.5		0.21		NA		4.4		0.21	5		0.21	3.3		0.21	3.7		0.21
Copper	mg/Kg	43	J	5	55	J	0.5	47	J	0.49		NA		250	J	0.5	82	J	0.49	55	J	0.5	130	J	0.49
Lead	mg/Kg	41	J	0.25	66	J	0.25	54	J	0.25		NA		230	J	0.25	26	J	0.25	32	J	0.25	370	J	0.25
Mercury	mg/Kg	0.08		0.012	0.11		0.012	0.14		0.012		NA		0.089		0.012	0.48		0.012	0.04		0.012	0.037		0.012
Molybdenum	mg/Kg	1.7		0.5	1.3		0.5	1.2		0.49		NA		8.7		0.5	2.9		0.49	1.1		0.5	1.3		0.49
Nickel	mg/Kg	9.4		0.5	16		0.5	14		0.49		NA		66		0.5	24		0.49	7		0.5	8.8		0.49
Selenium	mg/Kg	0.22	J	0.2	0.78	J	0.2	0.34	J	0.2		NA		0.24	J	0.2		U	0.2	0.23	J	0.2		U	0.2
Silver	mg/Kg	0.33	J	0.099	0.2	J	0.1	0.27	J	0.099		NA		0.37	J	0.099	0.14	J	0.099		U	0.1	1.8		0.099
Thallium	mg/Kg		U	0.25		U	0.25		U	0.25		NA			U	0.25		U	0.25		U	0.25		U	0.25
Vanadium	mg/Kg	13		0.5	25		0.5	26		0.49		NA		21		0.5	16		0.49	15		0.5	22		0.49
Zinc	mg/Kg	190		5	390		5	310		4.9		NA		430		5	200		4.9	100		5	200		4.9
Total Conventionals																									
Percent Moisture	%	0.68		0.1	40		0.1	36		0.1		NA		21		0.1	0.19		0.1	31		0.1	2.6		0.1
Sulfate	mg/Kg	69	J	4	210	J	4	33	J	4		NA		61	J	4.1	170	J	4	31	J	4	160	J	4
Total Organic Carbon	mg/Kg	13000	J	390	36000	J	390	27000	J	390		NA		33000	J	390	19000	J	390	4100		390	3900	J	390
Dissolved Metals																									
Aluminum, Dissolved	ug/L		NA			NA			NA		48	J	25		NA			NA			NA			NA	
Antimony, Dissolved	ug/L		NA			NA			NA		3.5		1		NA			NA			NA			NA	
Arsenic, Dissolved	ug/L		NA			NA			NA		5.2		0.5		NA			NA			NA			NA	
Barium, Dissolved	ug/L		NA			NA			NA		58		0.5		NA			NA			NA			NA	
Beryllium, Dissolved	ug/L		NA			NA			NA			U	0.5		NA			NA			NA			NA	
Cadmium, Dissolved	ug/L		NA			NA			NA		0.3	J	0.25		NA			NA			NA			NA	
Chromium, Dissolved	ug/L		NA			NA			NA			U	1.3		NA			NA			NA			NA	
Cobalt, Dissolved	ug/L		NA			NA			NA			U	0.5		NA			NA			NA			NA	
Copper, Dissolved	ug/L		NA			NA			NA		60		1.3		NA			NA			NA			NA	
Lead, Dissolved	ug/L		NA			NA			NA		0.99		0.25		NA			NA			NA			NA	
Mercury, Dissolved	mg/L		NA			NA			NA			U	0.0001		NA			NA			NA			NA	
Molybdenum, Dissolved	ug/L		NA			NA			NA		8.6		0.5		NA			NA			NA			NA	
Nickel, Dissolved	ug/L		NA			NA			NA		6.8		0.75		NA			NA			NA			NA	
Selenium, Dissolved	ug/L		NA			NA			NA			UJ	1.5		NA			NA			NA			NA	
Silver, Dissolved	ug/L		NA			NA			NA			U	0.5		NA			NA			NA			NA	
Thallium, Dissolved	ug/L		NA			NA			NA			U	0.25		NA			NA			NA			NA	
Vanadium, Dissolved	ug/L		NA			NA			NA		6.5		0.5		NA			NA			NA			NA	
Zinc, Dissolved	ug/L		NA			NA			NA		25		10		NA			NA			NA			NA	
Dissolved Conventionals																									
Sulfate, Dissolved	mg/L		NA			NA			NA		83	J	13		NA			NA			NA			NA	

QA Scientist Amy Graham

Date 10/12/2015

EXIDE VERNON
NRDD Sediment Sampling, 8/11/15
TA Irvine# 440-117992 Project# 2013-2993

Sample Location		P-107			P-108			P-109			P-110			P-111			P-112			P-112W			P-113		
Lab ID		440-117992-09			440-117992-10			440-117992-11			440-117992-12			440-117992-13			440-117992-14			440-117992-15			440-117992-16		
Sample Date		8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix		Sediment			Sediment			Sediment			Sediment			Sediment			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment		
Remarks																									
Parameter	**Units**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Total Metals																									
Aluminum	mg/Kg	3800		25	17000		250	18000		250	3400		25	7800		25	5100		25		NA		2000		25
Antimony	mg/Kg		U	0.27		U	0.27	0.37	J	0.27	0.33	J	0.27	0.94	J	0.27		U	0.27		NA		0.64	J	0.27
Arsenic	mg/Kg	1.9		0.25	8.1		0.25	8.2		0.25	3		0.25	5		0.25	3.6		0.25		NA			U	0.25
Barium	mg/Kg	130	J	0.25	300	J	0.25	320	J	0.25	170	J	0.25	220	J	0.25	81	J	0.25		NA		43	J	0.25
Beryllium	mg/Kg	0.16	J	0.15	0.62		0.15	0.68		0.15		U	0.15	0.28	J	0.15	0.25	J	0.15		NA			U	0.15
Cadmium	mg/Kg	0.3	J	0.25	2.2		0.25	2.3		0.25	0.99		0.25	1.4		0.25	0.34	J	0.25		NA		0.33	J	0.25
Chromium	mg/Kg	8.6		0.5	34		0.5	36		0.49	22		0.5	24		0.5	10		0.49		NA		9.5		0.49
Cobalt	mg/Kg	3.7		0.21	11		0.21	11		0.21	3		0.21	7.6		0.21	4.9		0.21		NA		2.7		0.21
Copper	mg/Kg	52	J	0.5	140	J	0.5	150	J	0.49	120	J	0.5	110	J	0.5	76	J	0.49		NA		730	J	0.49
Lead	mg/Kg	63	J	0.25	99	J	0.25	110	J	0.25	64	J	0.25	440	J	0.25	23	J	0.25		NA		9300	J	2.5
Mercury	mg/Kg	0.054		0.012	0.15		0.012	0.23	J	0.012	0.033		0.012	0.099		0.012	0.034		0.012		NA		0.11		0.012
Molybdenum	mg/Kg	0.87	J	0.5	4.7		0.5	5.7		0.49	2		0.5	3.7		0.5	0.77	J	0.49		NA			U	0.49
Nickel	mg/Kg	7.3		0.5	28		0.5	30		0.49	11		0.5	28		0.5	7.8		0.49		NA		9.9		0.49
Selenium	mg/Kg		U	0.2	1.4		0.2	1.3		0.2		U	0.2	1.1		0.2		U	0.2		NA			U	0.2
Silver	mg/Kg	0.26	J	0.099	0.45	J	0.1	0.44	J	0.099		U	0.1	0.33	J	0.1	0.14	J	0.099		NA		1.4		0.099
Thallium	mg/Kg		U	0.25	0.26	J	0.25	0.27	J	0.25		U	0.25		U	0.25		U	0.25		NA			U	0.25
Vanadium	mg/Kg	18		0.5	50		0.5	55		0.49	12		0.5	29		0.5	21		0.49		NA		5.1		0.49
Zinc	mg/Kg	110		5	850		5	900		4.9	200		5	840		5	81		4.9		NA		130		4.9
Total Conventionals																									
Percent Moisture	%	0.9		0.1	1.8		0.1	2.2		0.1	0.058		0.1	48		0.1	7.5		0.1		NA		10		0.1
Sulfate	mg/Kg	190	J	8	460	J	20	190	J	4	30	J	4	74	J	4	23	J	4		NA		26	J	3.9
Total Organic Carbon	mg/Kg	5100	J	390	87000		390	150000		390	9700	J	390	63000	J	390	6700	J	390		NA		19000	J	390
Dissolved Metals																									
Aluminum, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		21		10		NA	
Antimony, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		0.9	J	0.4		NA	
Arsenic, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		17		0.2		NA	
Barium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		110		0.2		NA	
Beryllium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		0.25	J	0.2		NA	
Cadmium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		0.29		0.1		NA	
Chromium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		1.5		0.5		NA	
Cobalt, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		4.7		0.2		NA	
Copper, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		59		0.5		NA	
Lead, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		2.7		0.1		NA	
Mercury, Dissolved	mg/L		NA			NA			NA			NA			NA			NA			U	0.0001		NA	
Molybdenum, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		15		0.2		NA	
Nickel, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		24		0.3		NA	
Selenium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		7.1		0.6		NA	
Silver, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		0.23	J	0.2		NA	
Thallium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		0.21		0.1		NA	
Vanadium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		4.7		0.2		NA	
Zinc, Dissolved	ug/L		NA			NA			NA			NA			NA			NA		54		4		NA	
Dissolved Conventionals																									
Sulfate, Dissolved	mg/L		NA			NA			NA			NA			NA			NA		140	J	13		NA	

QA Scientist Amy Graham

Date 10/12/2015

EXIDE VERNON
NRDD Sediment Sampling, 8/11/15
TA Irvine# 440-117992 Project# 2013-2993

Sample Location		P-113			P-113			P-113			P-114			P-115			P-116			P-117			P-118		
Lab ID		440-117992-16			440-117992-16			440-117992-16			440-117992-17			440-117992-18			440-117992-19			440-117992-20			440-117992-21		
Sample Date		8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix		Sediment			Sediment			Sediment			Sediment			Sediment			Sediment			Sediment			Sediment		
Remarks		Triplicate Reanalysis			Triplicate Reanalysis			Triplicate Reanalysis																	
Parameter	**Units**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Total Metals																									
Aluminum	mg/Kg		NA			NA			NA		1500		25	4600		25	8600		25	4300		25	3000		25
Antimony	mg/Kg		NA			NA			NA		0.38	J	0.27		U	0.27		U	0.27		U	0.27		U	0.27
Arsenic	mg/Kg		NA			NA			NA		7.1		0.25	2.1		0.25	3.7		0.25	1.8		0.25	2.2	J	0.25
Barium	mg/Kg		NA			NA			NA		250	J	0.25	94	J	0.25	190	J	0.25	85	J	0.25	46	J	0.25
Beryllium	mg/Kg		NA			NA			NA		0.53		0.15	0.19	J	0.15	0.29	J	0.15	0.15	J	0.15		U	0.15
Cadmium	mg/Kg		NA			NA			NA		1.8		0.25	0.27	J	0.25	0.97		0.25	0.33	J	0.25		U	0.25
Chromium	mg/Kg		NA			NA			NA		29		0.5	11		0.49	19		0.5	7.6		0.49	4.5		0.5
Cobalt	mg/Kg		NA			NA			NA		8.8		0.21	3.9		0.21	5.6		0.21	3.1		0.21	2.6		0.21
Copper	mg/Kg		NA			NA			NA		120	J	0.5	29	J	0.49	69	J	0.5	30	J	0.49	32	J	0.5
Lead	mg/Kg	25		0.49	29		0.25	1500		0.49	97	J	0.25	36	J	0.25	56	J	0.25	25	J	0.25	4.3	J	0.25
Mercury	mg/Kg		NA			NA			NA		0.11		0.012	0.063		0.012	0.1		0.012	0.06		0.012	0.36	J	0.012
Molybdenum	mg/Kg		NA			NA			NA		3.5		0.5	0.92	J	0.49	2.4		0.5	0.75	J	0.49	0.52	J	0.5
Nickel	mg/Kg		NA			NA			NA		23		0.5	7.6		0.49	16		0.5	7.3		0.49	3.5		0.5
Selenium	mg/Kg		NA			NA			NA		1.2		0.2		U	0.2	0.71	J	0.2		U	0.2		U	0.2
Silver	mg/Kg		NA			NA			NA		0.35	J	0.1		U	0.099	0.21	J	0.099		U	0.099		U	0.099
Thallium	mg/Kg		NA			NA			NA			U	0.25		U	0.25		U	0.25		U	0.25		U	0.25
Vanadium	mg/Kg		NA			NA			NA		44		0.5	22		0.49	29		0.5	15		0.49	12		0.5
Zinc	mg/Kg		NA			NA			NA		640		5	110		4.9	440		5	120		4.9	38		5
Total Conventionals																									
Percent Moisture	%		NA			NA			NA		0.93		0.1	0.24		0.1	3.4		0.1	26		0.1	9.5		0.1
Sulfate	mg/Kg		NA			NA			NA		210	J	8	190	J	4	1700	J	81	76	J	4	64	J	4
Total Organic Carbon	mg/Kg		NA			NA			NA		100000		390	2700	J	390	45000	J	390	9500	J	390	9100	J	390
Dissolved Metals																									
Aluminum, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Antimony, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Arsenic, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Barium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Beryllium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Cadmium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Chromium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Cobalt, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Copper, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Lead, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Mercury, Dissolved	mg/L		NA			NA			NA			NA			NA			NA			NA			NA	
Molybdenum, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Nickel, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Selenium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Silver, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Thallium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Vanadium, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Zinc, Dissolved	ug/L		NA			NA			NA			NA			NA			NA			NA			NA	
Dissolved Conventionals																									
Sulfate, Dissolved	mg/L		NA			NA			NA			NA			NA			NA			NA			NA	

QA Scientist Amy Graham

Date 10/12/2015

EXIDE VERNON
NRDD Sediment Sampling, 8/11/15
TA Irvine# 440-117992 Project# 2013-2993

Sample Location		P-118W			P-119			P-119W			P-120			P-121			P-122			P-122W			P-123		
Lab ID		440-117992-22			440-117992-23			440-117992-24			440-117992-25			440-117992-26			440-117992-27			440-117992-28			440-117992-29		
Sample Date		8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix		Pore Water (ug/L) Hg only - mg/L			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment			Sediment			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment		
Remarks																									
Parameter	**Units**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Total Metals																									
Aluminum	mg/Kg		NA		2400		25		NA		4100		25	3100		25	3000		25		NA		3900		25
Antimony	mg/Kg		NA		4.5		0.27		NA		0.46	J	0.27	0.45	J	0.27	0.62	J	0.27		NA			U	0.27
Arsenic	mg/Kg		NA		2.2		0.25		NA		1.3		0.25	2.3		0.25	1.8		0.25		NA		1.8		0.25
Barium	mg/Kg		NA		70	J	0.25		NA		62		0.25	89		0.25	45		0.25		NA		54		0.25
Beryllium	mg/Kg		NA			U	0.15		NA			U	0.15		U	0.15		U	0.15		NA			U	0.15
Cadmium	mg/Kg		NA		0.37	J	0.25		NA			U	0.25		U	0.25	0.29	J	0.25		NA			U	0.25
Chromium	mg/Kg		NA		13		0.5		NA		7.9		0.5	14		0.5	9.8		0.5		NA		7.9		0.5
Cobalt	mg/Kg		NA		3.3		0.21		NA		2.6		0.21	2.8		0.21	2.6		0.21		NA		2.9		0.21
Copper	mg/Kg		NA		87	J	0.5		NA		26		0.5	33		0.5	22		0.5		NA		37		0.5
Lead	mg/Kg		NA		61	J	0.25		NA		14		0.25	250		0.25	88		0.25		NA		13		0.25
Mercury	mg/Kg		NA		0.035		0.012		NA		0.045		0.012	0.069		0.012	0.099		0.012		NA		0.08		0.012
Molybdenum	mg/Kg		NA		1.6		0.5		NA		0.74	J	0.5	2.4		0.5	0.66	J	0.5		NA		0.96	J	0.5
Nickel	mg/Kg		NA		13		0.5		NA		5.5		0.5	10		0.5	6.3		0.5		NA		5.5		0.5
Selenium	mg/Kg		NA			U	0.2		NA			U	0.2		U	0.2		U	0.2		NA			U	0.2
Silver	mg/Kg		NA		0.11	J	0.099		NA		0.11	J	0.1		U	0.1		U	0.099		NA			U	0.1
Thallium	mg/Kg		NA			U	0.25		NA			U	0.25		U	0.25		U	0.25		NA			U	0.25
Vanadium	mg/Kg		NA		11		0.5		NA		16		0.5	12		0.5	15		0.5		NA		21		0.5
Zinc	mg/Kg		NA		200		5		NA		84		5	130		5	110		5		NA		73		5
Total Conventionals																									
Percent Moisture	%		NA		12		0.1		NA		33		0.1	8.2		0.1	16		0.1		NA		10		0.1
Sulfate	mg/Kg		NA		67	J	4		NA		31	J	4	22	J	4	31	J	4		NA		40	J	4
Total Organic Carbon	mg/Kg		NA		21000	J	390		NA		10000	J	390	7400	J	390	16000	J	390		NA		1900	J	390
Dissolved Metals																									
Aluminum, Dissolved	ug/L	11	J	10					U	25		NA			NA			NA		40	J	25		NA	
Antimony, Dissolved	ug/L	0.92	J	0.4				2.1	J	1		NA			NA			NA		5		1		NA	
Arsenic, Dissolved	ug/L	8.9		0.2				8.9		0.5		NA			NA			NA		7.4		0.5		NA	
Barium, Dissolved	ug/L	78	J	0.2				170		0.5		NA			NA			NA		170		0.5		NA	
Beryllium, Dissolved	ug/L		U	0.2					U	0.5		NA			NA			NA			U	0.5		NA	
Cadmium, Dissolved	ug/L		U	0.1					U	0.25		NA			NA			NA			U	0.25		NA	
Chromium, Dissolved	ug/L	0.78	J	0.5				1.4	J	1.3		NA			NA			NA		1.6	J	1.3		NA	
Cobalt, Dissolved	ug/L	1.7		0.2				2.1		0.5		NA			NA			NA		1.4		0.5		NA	
Copper, Dissolved	ug/L	7.2	J	0.5				5.4		1.3		NA			NA			NA		140		1.3		NA	
Lead, Dissolved	ug/L	2		0.1				2.7		0.25		NA			NA			NA		2		0.25		NA	
Mercury, Dissolved	mg/L		U	0.0001					U	0.0001		NA			NA			NA			U	0.0005		NA	
Molybdenum, Dissolved	ug/L	22	J	0.2				34		0.5		NA			NA			NA		71		0.5		NA	
Nickel, Dissolved	ug/L	12	J	0.3				17		0.75		NA			NA			NA		22		0.75		NA	
Selenium, Dissolved	ug/L	3.3		0.6				1.5	J	1.5		NA			NA			NA			UJ	1.5		NA	
Silver, Dissolved	ug/L		U	0.2					U	0.5		NA			NA			NA			U	0.5		NA	
Thallium, Dissolved	ug/L		U	0.1					U	0.25		NA			NA			NA			U	0.25		NA	
Vanadium, Dissolved	ug/L	5.9	J	0.2				7.3		0.5		NA			NA			NA		6		0.5		NA	
Zinc, Dissolved	ug/L	24	J	4				22	J	10		NA			NA			NA		61		10		NA	
Dissolved Conventionals																									
Sulfate, Dissolved	mg/L	140	J	13				65	J	13		NA			NA			NA		120	J	13		NA	

QA Scientist Amy Graham

Date 10/12/2015

EXIDE VERNON
NRDD Sediment Sampling, 8/11/15
TA Irvine# 440-117992 Project# 2013-2993

Sample Location		P-124			P-125			P-126			P-126W			P-127			P-127W			P-128			P-129		
Lab ID		440-117992-30			440-117992-31			440-117992-32			440-117992-33			440-117992-34			440-117992-35			440-117992-36			440-117992-37		
Sample Date		8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix		Sediment			Sediment			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment			Sediment		
Remarks																									
Parameter	**Units**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Total Metals																									
Aluminum	mg/Kg	3800		25	3900		25	3500		25		NA		2800		25		NA		2700		25	22000		250
Antimony	mg/Kg	0.32	J	0.27	1.1	J	0.27		U	0.27		NA			U	0.26		NA			U	0.27	1.5		0.27
Arsenic	mg/Kg	1.9		0.25	2.1		0.25	1.6		0.25		NA		1.8		0.25		NA		0.96		0.25	7.5		0.25
Barium	mg/Kg	58		0.25	92		0.25	82		0.25		NA		32		0.25		NA		33		0.25	230		0.25
Beryllium	mg/Kg		U	0.15		U	0.15		U	0.15		NA			U	0.15		NA			U	0.15	0.56		0.15
Cadmium	mg/Kg	0.25	J	0.25	0.48	J	0.25	0.27	J	0.25		NA			U	0.25		NA			U	0.25	1.5		0.25
Chromium	mg/Kg	7.5		0.5	110		0.5	16		0.5		NA		4.4		0.49		NA		5.6		0.49	33		0.49
Cobalt	mg/Kg	2.8		0.21	3.4		0.21	6.4		0.21		NA		2.3		0.21		NA		2.1		0.21	9.9		0.21
Copper	mg/Kg	33		0.5	170		0.5	26		0.5		NA		27		0.49		NA		15		0.49	110		0.49
Lead	mg/Kg	16		0.25	86		0.25	130		0.25		NA		5.3		0.25		NA		28		0.25	65		0.25
Mercury	mg/Kg	0.041		0.012	0.055		0.012	0.034		0.012		NA		0.09	J	0.012		NA		0.14		0.012	0.17		0.012
Molybdenum	mg/Kg	0.86	J	0.5	1.6		0.5	1.2		0.5		NA			U	0.49		NA		0.54	J	0.49	3.4		0.49
Nickel	mg/Kg	5.3		0.5	13		0.5	7.3		0.5		NA		3.3		0.49		NA		3.7		0.49	23		0.49
Selenium	mg/Kg	0.25	J	0.2	0.43	J	0.2		U	0.2		NA			U	0.2		NA			U	0.2	0.89	J	0.2
Silver	mg/Kg		U	0.099	0.13	J	0.1		U	0.1		NA			U	0.098		NA			U	0.099	0.41	J	0.099
Thallium	mg/Kg		U	0.25		U	0.25		U	0.25		NA			U	0.25		NA			U	0.25		U	0.25
Vanadium	mg/Kg	18		0.5	16		0.5	27		0.5		NA		11		0.49		NA		15		0.49	53		0.49
Zinc	mg/Kg	81		5	340		5	130		5		NA		35		4.9		NA		58		4.9	570		4.9
Total Conventionals																									
Percent Moisture	%	16		0.1	37		0.1	34		0.1		NA		9.7		0.1		NA		29		0.1	1.3		0.1
Sulfate	mg/Kg	51	J	4	1200	J	40	130	J	4		NA		170	J	4		NA		83	J	4.1	1300	J	79
Total Organic Carbon	mg/Kg	2700	J	390	50000	J	390	18000	J	390		NA		4300	J	390		NA		23000	J	390	60000		390
Dissolved Metals																									
Aluminum, Dissolved	ug/L		NA			NA			NA		18	J	10		NA			U	25		NA			NA	
Antimony, Dissolved	ug/L		NA			NA			NA		1.1		0.4		NA			U	1		NA			NA	
Arsenic, Dissolved	ug/L		NA			NA			NA		6.8		0.2		NA		12		0.5		NA			NA	
Barium, Dissolved	ug/L		NA			NA			NA		98		0.2		NA		130	J	0.5		NA			NA	
Beryllium, Dissolved	ug/L		NA			NA			NA			U	0.2		NA		0.52	J	0.5		NA			NA	
Cadmium, Dissolved	ug/L		NA			NA			NA			U	0.1		NA			U	0.25		NA			NA	
Chromium, Dissolved	ug/L		NA			NA			NA		3.3		0.5		NA		1.6	J	1.3		NA			NA	
Cobalt, Dissolved	ug/L		NA			NA			NA		0.6		0.2		NA		1.5		0.5		NA			NA	
Copper, Dissolved	ug/L		NA			NA			NA		10		0.5		NA		4.9		1.3		NA			NA	
Lead, Dissolved	ug/L		NA			NA			NA		0.52		0.1		NA		0.9		0.25		NA			NA	
Mercury, Dissolved	mg/L		NA			NA			NA			U	0.0001		NA			U	0.0001		NA			NA	
Molybdenum, Dissolved	ug/L		NA			NA			NA		9.3		0.2		NA		29	J	0.5		NA			NA	
Nickel, Dissolved	ug/L		NA			NA			NA		5.1		0.3		NA		5.7	J	0.75		NA			NA	
Selenium, Dissolved	ug/L		NA			NA			NA			UJ	0.6		NA		2.3	J	1.5		NA			NA	
Silver, Dissolved	ug/L		NA			NA			NA			U	0.2		NA			U	0.5		NA			NA	
Thallium, Dissolved	ug/L		NA			NA			NA			U	0.1		NA		0.27	J	0.25		NA			NA	
Vanadium, Dissolved	ug/L		NA			NA			NA		3.3		0.2		NA		6.6	J	0.5		NA			NA	
Zinc, Dissolved	ug/L		NA			NA			NA		9.4	J	4		NA		15	J	10		NA			NA	
Dissolved Conventionals																									
Sulfate, Dissolved	mg/L		NA			NA			NA		53	J	13		NA		47	J	13		NA			NA	

QA Scientist Amy Graham

Date 10/12/2015

EXIDE VERNON
NRDD Sediment Sampling, 8/11/15
TA Irvine# 440-117992 Project# 2013-2993

Sample Location		P-127D			P-127D-W			P-118D			P-118D-W			P-109D		
Lab ID		440-117992-38			440-117992-39			440-117992-40			440-117992-41			440-117992-42		
Sample Date		8/11/2015			8/11/2015			8/11/2015			8/11/2015			8/11/2015		
Matrix		Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment			Pore Water (ug/L) Hg only - mg/L			Sediment		
Remarks		FD of P-127			FD of P-127W			FD of P-118			FD of P-118W			FD of P-109		
Parameter	**Units**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Total Metals																
Aluminum	mg/Kg	3000		25		NA		2700		25		NA		21000		250
Antimony	mg/Kg		U	0.27		NA			U	0.26		NA		2.3		0.27
Arsenic	mg/Kg	2.2		0.25		NA		1.1	J	0.25		NA		7.7		0.25
Barium	mg/Kg	39		0.25		NA		29	J	0.25		NA		290		0.25
Beryllium	mg/Kg		U	0.15		NA			U	0.15		NA		0.63		0.15
Cadmium	mg/Kg		U	0.25		NA			U	0.25		NA		2.1		0.25
Chromium	mg/Kg	5.2		0.5		NA		4.4		0.49		NA		37		0.5
Cobalt	mg/Kg	2.2		0.21		NA		1.9		0.21		NA		11		0.21
Copper	mg/Kg	23		0.5		NA		19	J	0.49		NA		140		0.5
Lead	mg/Kg	6.5		0.25		NA		12	J	0.25		NA		100		0.25
Mercury	mg/Kg	0.03	J	0.012		NA		0.027	J	0.012		NA		0.35	J	0.012
Molybdenum	mg/Kg		U	0.5		NA			U	0.49		NA		5.4		0.5
Nickel	mg/Kg	3.9		0.5		NA		3.6		0.49		NA		28		0.5
Selenium	mg/Kg		U	0.2		NA			U	0.2		NA		1.1		0.2
Silver	mg/Kg	0.13	J	0.1		NA			U	0.098		NA		0.66		0.1
Thallium	mg/Kg		U	0.25		NA			U	0.25		NA			U	0.25
Vanadium	mg/Kg	13		0.5		NA		10		0.49		NA		57		0.5
Zinc	mg/Kg	34		5		NA		30		4.9		NA		840		5
Total Conventionals																
Percent Moisture	%	9.2		0.1		NA		6.6		0.1		NA		2.1		0.1
Sulfate	mg/Kg	140	J	4		NA		78	J	4		NA		180	J	4
Total Organic Carbon	mg/Kg	3900		390		NA		4200	J	390		NA		160000		390
Dissolved Metals																
Aluminum, Dissolved	ug/L		NA			U	25		NA		41	J	10		NA	
Antimony, Dissolved	ug/L		NA			U	1		NA		1.4		0.4		NA	
Arsenic, Dissolved	ug/L		NA		15		0.5		NA		11		0.2		NA	
Barium, Dissolved	ug/L		NA		54	J	0.5		NA		50	J	0.2		NA	
Beryllium, Dissolved	ug/L		NA			U	0.5		NA			U	0.2		NA	
Cadmium, Dissolved	ug/L		NA			U	0.25		NA			U	0.1		NA	
Chromium, Dissolved	ug/L		NA		10	J	1.3		NA		1.1		0.5		NA	
Cobalt, Dissolved	ug/L		NA		1.8		0.5		NA		2.2		0.2		NA	
Copper, Dissolved	ug/L		NA		6.2		1.3		NA		11	J	0.5		NA	
Lead, Dissolved	ug/L		NA		1.3		0.25		NA		2.4		0.1		NA	
Mercury, Dissolved	mg/L		NA			U	0.0001		NA			U	0.0001		NA	
Molybdenum, Dissolved	ug/L		NA		53	J	0.5		NA		36	J	0.2		NA	
Nickel, Dissolved	ug/L		NA		9.3	J	0.75		NA		23	J	0.3		NA	
Selenium, Dissolved	ug/L		NA		4		1.5		NA		4.1		0.6		NA	
Silver, Dissolved	ug/L		NA			U	0.5		NA			U	0.2		NA	
Thallium, Dissolved	ug/L		NA			U	0.25		NA			U	0.1		NA	
Vanadium, Dissolved	ug/L		NA		9.8	J	0.5		NA		12	J	0.2		NA	
Zinc, Dissolved	ug/L		NA		20	J	10		NA		45	J	4		NA	
Dissolved Conventionals																
Sulfate, Dissolved	mg/L		NA		110	J	13		NA		210	J	13		NA	

QA Scientist Amy Graham

Date 10/12/2015

METALS DATA VALIDATION SUMMARY

Site Name: Exide Vernon
Project Number: 2013-2993-20
Sampling Date(s): 8/11/2015

Laboratory: Test America - Irvine
Case/Order No.: 440-117992

Compound List: CAM17

Method: 6020/7471A/7470A

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

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			
ICP/MS Tuning	X			
Initial Calibrations	X			
Continuing Calibrations	X			
Blank Analysis			X	CCB
Field Duplicate Analysis			X	P-127 & P-127D, P-127W & P-127D-W, P-118 & P-118D, P-118W & P-118D-W, P-109 & P-109D
Matrix Spike Analysis (MS/MSD)			X	MS/MSD Recoveries
Laboratory Control Sample Analysis (LCS)	X			
Laboratory Duplicate Analysis	X			
ICP/MS Internal Standard	X			
CRDL Standard			X	CRDL Recoveries
Serial Dilution		X		
Interference Check Sample Recoveries	X			
Overall Assessment of Data	X			
Other:		X		Sample P-113 reanalyzed.

General Comments: Cooler Temp: 4.8°C, 5.2°C, 5.3°C, 5.5°C & 6.0°C

See attached letter dated November 6, 2015 for laboratory issues encountered during the re-analyses of P-113

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

QA Scientist Amy Graham

Date 9/17/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-100**

Lab Sample ID: 440-117992-1
Client Matrix: Solid

Date Sampled: 08/11/2015 1600
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	023SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 1730			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.4 J		0.27	0.99
Arsenic		2.2		0.25	0.50
Barium		76 J		0.25	0.50
Beryllium		0.15	J	0.15	0.30
Cadmium		0.51		0.25	0.50
Chromium		14		0.50	0.99
Cobalt		3.6		0.21	0.50
Lead		41 J		0.25	0.50
Molybdenum		1.7		0.50	0.99
Nickel		9.4		0.50	0.99
Silver		0.33	J	0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		13		0.50	0.99
Zinc		190		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	059SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2217			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.22	J	0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	021SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1228			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4300		25	50
Copper		43 J		5.0	9.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1358			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

9/17/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-100**

Lab Sample ID: 440-117992-1

Client Matrix: Solid

Date Sampled: 08/11/2015 1600

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.080		0.012	0.020

AKG
9/17/2015

Client: Advanced GeoServices Corporation | Job Number: 440-117992-1

Client Sample ID: **P-101**

Lab Sample ID: 440-117992-2 | Date Sampled: 08/11/2015 1550
Client Matrix: Solid | Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	027SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	08/16/2015 1740			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.29	J	0.27	1.0
Arsenic		2.8		0.25	0.50
Barium		140 J		0.25	0.50
Beryllium		0.28	J	0.15	0.30
Cadmium		0.95		0.25	0.50
Chromium		17		0.50	1.0
Cobalt		5.7		0.21	0.50
Copper		55 J		0.50	1.0
Lead		66 J		0.25	0.50
Molybdenum		1.3		0.50	1.0
Nickel		16		0.50	1.0
Silver		0.20	J	0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		25		0.50	1.0
Zinc		390		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	061SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	08/17/2015 2222			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.78	J	0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	023SMPL.d
Dilution:	200			Initial Weight/Volume:	2.00 g
Analysis Date:	08/17/2015 1234			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8400		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1400			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

9/17/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-101**

Lab Sample ID: 440-117992-2

Client Matrix: Solid

Date Sampled: 08/11/2015 1550

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11		0.012	0.020

AKG
9/17/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-102**

Lab Sample ID: 440-117992-3

Client Matrix: Solid

Date Sampled: 08/11/2015 1555

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	028SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1743			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		2.8		0.25	0.49
Barium		130 J		0.25	0.49
Beryllium		0.26	J	0.15	0.30
Cadmium		0.80		0.25	0.49
Chromium		16		0.49	0.99
Cobalt		5.5		0.21	0.49
Copper		47 J		0.49	0.99
Lead		54 J		0.25	0.49
Molybdenum		1.2		0.49	0.99
Nickel		14		0.49	0.99
Silver		0.27	J	0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		26		0.49	0.99
Zinc		310		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	062SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2225			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.34	J	0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	024SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1236			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8700		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1403			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-102**

Lab Sample ID: 440-117992-3

Client Matrix: Solid

Date Sampled: 08/11/2015 1555

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.14		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-102-W**

Lab Sample ID: 440-117992-4
Client Matrix: Water

Date Sampled: 08/11/2015 1555
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	030SMPL.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1237			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	48	J	25	50
Antimony	3.5		1.0	2.5
Arsenic	5.2		0.50	1.0
Barium	58		0.50	1.0
Beryllium	ND		0.50	1.0
Cadmium	0.30	J	0.25	0.50
Chromium	ND		1.3	2.5
Cobalt	ND		0.50	1.0
Copper	60		1.3	2.5
Lead	0.99		0.25	0.50
Molybdenum	8.6		0.50	1.0
Nickel	6.8	^	0.75	1.5
Selenium	ND UJ		1.5	3.0
Silver	ND		0.50	1.0
Thallium	ND		0.25	0.50
Vanadium	6.5		0.50	1.0
Zinc	25		10	25

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1734			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-103**

Lab Sample ID: 440-117992-5

Client Matrix: Solid

Date Sampled: 08/11/2015 1525

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	029SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 1746			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.47	J	0.27	0.99
Arsenic		3.3		0.25	0.50
Barium		110 J		0.25	0.50
Beryllium		0.16	J	0.15	0.30
Cadmium		1.0		0.25	0.50
Chromium		25		0.50	0.99
Cobalt		4.4		0.21	0.50
Copper		250 J		0.50	0.99
Lead		230J		0.25	0.50
Molybdenum		8.7		0.50	0.99
Nickel		66		0.50	0.99
Silver		0.37	J	0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		21		0.50	0.99
Zinc		430		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	065SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2233			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.24	J	0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	027SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1249			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7200		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1410			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-103**

Lab Sample ID: 440-117992-5

Client Matrix: Solid

Date Sampled: 08/11/2015 1525

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.089		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-104**

Lab Sample ID: 440-117992-6
Client Matrix: Solid

Date Sampled: 08/11/2015 1545
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	030SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1748			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.27	J	0.27	0.99
Arsenic		3.8		0.25	0.49
Barium		80 J		0.25	0.49
Beryllium		0.23	J	0.15	0.30
Cadmium		0.33	J	0.25	0.49
Chromium		17		0.49	0.99
Cobalt		5.0		0.21	0.49
Copper		82 J		0.49	0.99
Lead		26 J		0.25	0.49
Molybdenum		2.9		0.49	0.99
Nickel		24		0.49	0.99
Silver		0.14	J	0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		16		0.49	0.99
Zinc		200		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	066SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2236			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	028SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1251			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4000		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1413			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-104**

Lab Sample ID: 440-117992-6

Client Matrix: Solid

Date Sampled: 08/11/2015 1545

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.48		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-105**

Lab Sample ID: 440-117992-7

Client Matrix: Solid

Date Sampled: 08/11/2015 1530

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	019SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 1719			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	1.0
Arsenic		1.8		0.25	0.50
Barium		80 J	~~F1~~	0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.37	J	0.25	0.50
Chromium		8.0		0.50	1.0
Cobalt		3.3		0.21	0.50
Copper		55 J	~~F1~~	0.50	1.0
Lead		32 J	~~F2 F1~~	0.25	0.50
Molybdenum		1.1		0.50	1.0
Nickel		7.0		0.50	1.0
Silver		ND		0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		15		0.50	1.0
Zinc		100		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	055SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 2206			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.23	J	0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	017SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1218			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4000		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1350			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-105**

Lab Sample ID: 440-117992-7

Client Matrix: Solid

Date Sampled: 08/11/2015 1530

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.040		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-106**

Lab Sample ID: 440-117992-8

Client Matrix: Solid

Date Sampled: 08/11/2015 1520

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	031SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1751			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.42	J	0.27	0.99
Arsenic		2.8		0.25	0.49
Barium		83 J		0.25	0.49
Beryllium		ND		0.15	0.30
Cadmium		0.26	J	0.25	0.49
Chromium		12		0.49	0.99
Cobalt		3.7		0.21	0.49
Copper		130 J		0.49	0.99
Lead		370 J		0.25	0.49
Molybdenum		1.3		0.49	0.99
Nickel		8.8		0.49	0.99
Silver		1.8		0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		22		0.49	0.99
Zinc		200		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	067SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2238			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	029SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1254			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3200		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1415			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-106**

Lab Sample ID: 440-117992-8

Client Matrix: Solid

Date Sampled: 08/11/2015 1520

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.037		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-107**

Lab Sample ID: 440-117992-9

Client Matrix: Solid

Date Sampled: 08/11/2015 1535

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	032SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 1754			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		1.9		0.25	0.50
Barium		130 J		0.25	0.50
Beryllium		0.16	J	0.15	0.30
Cadmium		0.30	J	0.25	0.50
Chromium		8.6		0.50	0.99
Cobalt		3.7		0.21	0.50
Copper		52 J		0.50	0.99
Lead		63 J		0.25	0.50
Molybdenum		0.87	J	0.50	0.99
Nickel		7.3		0.50	0.99
Silver		0.26	J	0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		18		0.50	0.99
Zinc		110		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	068SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2241			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	030SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1257			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3800		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1417			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-107**

Lab Sample ID: 440-117992-9

Client Matrix: Solid

Date Sampled: 08/11/2015 1535

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.054		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-108**

Lab Sample ID: 440-117992-10
Client Matrix: Solid

Date Sampled: 08/11/2015 1515
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	033SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	08/16/2015 1756			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	1.0
Arsenic		8.1		0.25	0.50
Barium		300 J		0.25	0.50
Beryllium		0.62		0.15	0.30
Cadmium		2.2		0.25	0.50
Chromium		34		0.50	1.0
Cobalt		11		0.21	0.50
Copper		140 J		0.50	1.0
Lead		99 J		0.25	0.50
Molybdenum		4.7		0.50	1.0
Nickel		28		0.50	1.0
Silver		0.45	J	0.10	0.50
Thallium		0.26	J	0.25	0.50
Vanadium		50		0.50	1.0
Zinc		850		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	069SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	08/17/2015 2244			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		1.4		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	031SMPL.d
Dilution:	2000			Initial Weight/Volume:	2.00 g
Analysis Date:	08/17/2015 1259			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		17000		250	500

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1420			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-108**

Lab Sample ID: 440-117992-10

Client Matrix: Solid

Date Sampled: 08/11/2015 1515

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.15		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-109**

Lab Sample ID: 440-117992-11
Client Matrix: Solid

Date Sampled: 08/11/2015 1500
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	034SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1759			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.37	J	0.27	0.99
Arsenic		8.2		0.25	0.49
Barium		320 J		0.25	0.49
Beryllium		0.68		0.15	0.30
Cadmium		2.3		0.25	0.49
Chromium		36		0.49	0.99
Cobalt		11		0.21	0.49
Copper		150 J		0.49	0.99
Lead		110 J		0.25	0.49
Molybdenum		5.7		0.49	0.99
Nickel		30		0.49	0.99
Silver		0.44	J	0.099	0.49
Thallium		0.27	J	0.25	0.49
Vanadium		55		0.49	0.99
Zinc		900		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	070SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2246			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		1.3		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	032SMPL.d
Dilution:	2000			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1302			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		18000		250	490

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1422			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-109**

Lab Sample ID: 440-117992-11

Client Matrix: Solid

Date Sampled: 08/11/2015 1500

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.23	J	0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-110**

Lab Sample ID: 440-117992-12

Client Matrix: Solid

Date Sampled: 08/11/2015 1540

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	035SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 1802			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.33	J	0.27	1.0
Arsenic		3.0		0.25	0.50
Barium		170 J		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.99		0.25	0.50
Chromium		22		0.50	1.0
Cobalt		3.0		0.21	0.50
Copper		120 J		0.50	1.0
Lead		64 J		0.25	0.50
Molybdenum		2.0		0.50	1.0
Nickel		11		0.50	1.0
Silver		ND		0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		12		0.50	1.0
Zinc		200		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	071SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 2249			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	033SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1305			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3400		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1425			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-110**

Lab Sample ID: 440-117992-12

Client Matrix: Solid

Date Sampled: 08/11/2015 1540

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.033		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-111**

Lab Sample ID: 440-117992-13
Client Matrix: Solid

Date Sampled: 08/11/2015 1510
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	038SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 1810			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.94	J	0.27	1.0
Arsenic		5.0		0.25	0.50
Barium		220 J		0.25	0.50
Beryllium		0.28	J	0.15	0.30
Cadmium		1.4		0.25	0.50
Chromium		24		0.50	1.0
Cobalt		7.6		0.21	0.50
Copper		110 J		0.50	1.0
Lead		440 J		0.25	0.50
Molybdenum		3.7		0.50	1.0
Nickel		28		0.50	1.0
Silver		0.33	J	0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		29		0.50	1.0
Zinc		840		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	072SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 2252			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		1.1		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	034SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1307			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7800		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1427			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-111**

Lab Sample ID: 440-117992-13

Client Matrix: Solid

Date Sampled: 08/11/2015 1510

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.099		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-112**

Lab Sample ID: 440-117992-14
Client Matrix: Solid

Date Sampled: 08/11/2015 1400
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	039SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1812			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		3.6		0.25	0.49
Barium		81 J		0.25	0.49
Beryllium		0.25	J	0.15	0.30
Cadmium		0.34	J	0.25	0.49
Chromium		10		0.49	0.99
Cobalt		4.9		0.21	0.49
Copper		76 J		0.49	0.99
Lead		23 J		0.25	0.49
Molybdenum		0.77	J	0.49	0.99
Nickel		7.8		0.49	0.99
Silver		0.14	J	0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		21		0.49	0.99
Zinc		81		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	073SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2254			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	035SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1310			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5100		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1429			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-112**

Lab Sample ID: 440-117992-14

Client Matrix: Solid

Date Sampled: 08/11/2015 1400

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.034		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-112-W**

Lab Sample ID: 440-117992-15
Client Matrix: Water

Date Sampled: 08/11/2015 1400
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	022SMPL.d
Dilution:	2.0			Initial Weight/Volume:	25 mL
Analysis Date:	09/04/2015 1217			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	21		10	20
Antimony	0.90	J	0.40	1.0
Arsenic	17		0.20	0.40
Barium	110		0.20	0.40
Beryllium	0.25	J	0.20	0.40
Cadmium	0.29		0.10	0.20
Chromium	1.5		0.50	1.0
Cobalt	4.7		0.20	0.40
Copper	59		0.50	1.0
Lead	2.7		0.10	0.20
Molybdenum	15		0.20	0.40
Nickel	24	^	0.30	0.60
Selenium	7.1		0.60	1.2
Silver	0.23	J	0.20	0.40
Thallium	0.21		0.10	0.20
Vanadium	4.7		0.20	0.40
Zinc	54		4.0	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1736			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-113**

Lab Sample ID: 440-117992-16
Client Matrix: Solid

Date Sampled: 08/11/2015 1440
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	040SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1815			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.64	J	0.27	0.99
Arsenic		ND		0.25	0.49
Barium		43 J		0.25	0.49
Beryllium		ND		0.15	0.30
Cadmium		0.33	J	0.25	0.49
Chromium		9.5		0.49	0.99
Cobalt		2.7		0.21	0.49
Copper		730 J		0.49	0.99
Lead		11000	E	0.25	0.49
Molybdenum		ND		0.49	0.99
Nickel		9.9		0.49	0.99
Silver		1.4		0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		5.1		0.49	0.99
Zinc		130		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	074SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2257			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-277670	Instrument ID:	ICPMS5
Prep Method:	3050B	Prep Batch:	440-276563	Lab File ID:	080SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	09/01/2015 1511			Final Weight/Volume:	50 mL
Prep Date:	08/27/2015 1510				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Lead		29		0.25	0.50

Analysis Method:	6020	Analysis Batch:	440-278998	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-278738	Lab File ID:	039SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	09/09/2015 1132			Final Weight/Volume:	50 mL
Prep Date:	09/08/2015 1356				

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Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Lead		25		0.25	0.49

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-113**

Lab Sample ID: 440-117992-16

Client Matrix: Solid

Date Sampled: 08/11/2015 1440

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-278998	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-278738	Lab File ID:	043SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	09/09/2015 1143			Final Weight/Volume:	50 mL
Prep Date:	09/08/2015 1356				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Lead		1500		0.25	0.49

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	036SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1313			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2000		25	49
Lead		9300	J	2.5	4.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1437			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11		0.012	0.020

See additional documentation regarding sample P-113
supplied by TA Irvine in a letter dated November 6, 2015.
This letter is attached to the end of this validation report

9/17/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-114**

Lab Sample ID: 440-117992-17

Client Matrix: Solid

Date Sampled: 08/11/2015 1435

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	041SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	08/16/2015 1818			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.38	J	0.27	1.0
Arsenic		7.1		0.25	0.50
Barium		250 J		0.25	0.50
Beryllium		0.53		0.15	0.30
Cadmium		1.8		0.25	0.50
Chromium		29		0.50	1.0
Cobalt		8.8		0.21	0.50
Copper		120 J		0.50	1.0
Lead		97 J		0.25	0.50
Molybdenum		3.5		0.50	1.0
Nickel		23		0.50	1.0
Silver		0.35	J	0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		44		0.50	1.0
Zinc		640		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	077SMPL.d
Dilution:	20			Initial Weight/Volume:	2.00 g
Analysis Date:	08/17/2015 2308			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		1.2		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	039SMPL.d
Dilution:	200			Initial Weight/Volume:	2.00 g
Analysis Date:	08/17/2015 1321			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1500		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1439			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-114**

Lab Sample ID: 440-117992-17

Client Matrix: Solid

Date Sampled: 08/11/2015 1435

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-115**

Lab Sample ID: 440-117992-18

Client Matrix: Solid

Date Sampled: 08/11/2015 1445

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	042SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1820			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		2.1		0.25	0.49
Barium		94 J		0.25	0.49
Beryllium		0.19	J	0.15	0.30
Cadmium		0.27	J	0.25	0.49
Chromium		11		0.49	0.99
Cobalt		3.9		0.21	0.49
Copper		29 J		0.49	0.99
Lead		36 J		0.25	0.49
Molybdenum		0.92	J	0.49	0.99
Nickel		7.6		0.49	0.99
Silver		ND		0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		22		0.49	0.99
Zinc		110		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	078SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2311			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	040SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1324			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4600		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1442			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-115**

Lab Sample ID: 440-117992-18

Client Matrix: Solid

Date Sampled: 08/11/2015 1445

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.063		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-116**

Lab Sample ID: 440-117992-19

Client Matrix: Solid

Date Sampled: 08/11/2015 1430

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	043SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 1823			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		3.7		0.25	0.50
Barium		190 J		0.25	0.50
Beryllium		0.29	J	0.15	0.30
Cadmium		0.97		0.25	0.50
Chromium		19		0.50	0.99
Cobalt		5.6		0.21	0.50
Copper		69 J		0.50	0.99
Lead		56 J		0.25	0.50
Molybdenum		2.4		0.50	0.99
Nickel		16		0.50	0.99
Silver		0.21	J	0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		29		0.50	0.99
Zinc		440		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	079SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2313			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.71	J	0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	041SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1326			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8600		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1444			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-116**

Lab Sample ID: 440-117992-19

Client Matrix: Solid

Date Sampled: 08/11/2015 1430

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.10		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-117**

Lab Sample ID: 440-117992-20

Client Matrix: Solid

Date Sampled: 08/11/2015 1350

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	044SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 1826			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		1.8		0.25	0.49
Barium		85 J		0.25	0.49
Beryllium		0.15	J	0.15	0.30
Cadmium		0.33	J	0.25	0.49
Chromium		7.6		0.49	0.99
Cobalt		3.1		0.21	0.49
Copper		30 J		0.49	0.99
Lead		25 J		0.25	0.49
Molybdenum		0.75	J	0.49	0.99
Nickel		7.3		0.49	0.99
Silver		ND		0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		15		0.49	0.99
Zinc		120		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	080SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 2316			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	042SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1329			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4300		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1447			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-117**

Lab Sample ID: 440-117992-20

Client Matrix: Solid

Date Sampled: 08/11/2015 1350

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.060		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118**

Lab Sample ID: 440-117992-21

Client Matrix: Solid

Date Sampled: 08/11/2015 1420

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	045SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 1828			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		2.2 J		0.25	0.50
Barium		46 J		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		ND		0.25	0.50
Chromium		4.5		0.50	0.99
Cobalt		2.6		0.21	0.50
Copper		32 J		0.50	0.99
Lead		4.3 J		0.25	0.50
Molybdenum		0.52	J	0.50	0.99
Nickel		3.5		0.50	0.99
Silver		ND		0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		12		0.50	0.99
Zinc		38		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	081SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2319			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	043SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1332			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3000		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1449			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118**

Lab Sample ID: 440-117992-21

Client Matrix: Solid

Date Sampled: 08/11/2015 1420

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.36	J	0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118-W**

Lab Sample ID: 440-117992-22

Client Matrix: Water

Date Sampled: 08/11/2015 1420

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	024SMPL.d
Dilution:	2.0			Initial Weight/Volume:	25 mL
Analysis Date:	09/04/2015 1222			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	11	J	10	20
Antimony	0.92	J	0.40	1.0
Arsenic	8.9		0.20	0.40
Barium	78 J		0.20	0.40
Beryllium	ND		0.20	0.40
Cadmium	ND		0.10	0.20
Chromium	0.78	J	0.50	1.0
Cobalt	1.7		0.20	0.40
Copper	7.2 J		0.50	1.0
Lead	2.0		0.10	0.20
Molybdenum	22 J		0.20	0.40
Nickel	12 J		0.30	0.60
Selenium	3.3		0.60	1.2
Silver	ND		0.20	0.40
Thallium	ND		0.10	0.20
Vanadium	5.9 J		0.20	0.40
Zinc	24 J		4.0	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1744			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-119**

Lab Sample ID: 440-117992-23
Client Matrix: Solid

Date Sampled: 08/11/2015 1355
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	046SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 1832			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.5		0.27	0.99
Arsenic		2.2		0.25	0.50
Barium		70 J		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.37	J	0.25	0.50
Chromium		13		0.50	0.99
Cobalt		3.3		0.21	0.50
Copper		87 J		0.50	0.99
Lead		61 J		0.25	0.50
Molybdenum		1.6		0.50	0.99
Nickel		13		0.50	0.99
Silver		0.11	J	0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		11		0.50	0.99
Zinc		200		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	082SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2321			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273419	Lab File ID:	044SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1334			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0724				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2400		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274228	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1452			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2003				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-119**

Lab Sample ID: 440-117992-23

Client Matrix: Solid

Date Sampled: 08/11/2015 1355

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.035		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-119-W**

Lab Sample ID: 440-117992-24
Client Matrix: Water

Date Sampled: 08/11/2015 1355
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	031SMPL.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1240			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		25	50
Antimony	2.1	J	1.0	2.5
Arsenic	8.9		0.50	1.0
Barium	170		0.50	1.0
Beryllium	ND		0.50	1.0
Cadmium	ND		0.25	0.50
Chromium	1.4	J	1.3	2.5
Cobalt	2.1		0.50	1.0
Copper	5.4		1.3	2.5
Lead	2.7		0.25	0.50
Molybdenum	34		0.50	1.0
Nickel	17	~~x~~	0.75	1.5
Selenium	1.5	J	1.5	3.0
Silver	ND		0.50	1.0
Thallium	ND		0.25	0.50
Vanadium	7.3		0.50	1.0
Zinc	22	J	10	25

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1746			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-120**

Lab Sample ID: 440-117992-25

Client Matrix: Solid

Date Sampled: 08/11/2015 1345

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	099SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2056			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.46	J	0.27	1.0
Arsenic		1.3		0.25	0.50
Barium		62		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		ND		0.25	0.50
Chromium		7.9		0.50	1.0
Cobalt		2.6		0.21	0.50
Copper		26		0.50	1.0
Lead		14		0.25	0.50
Molybdenum		0.74	J	0.50	1.0
Nickel		5.5		0.50	1.0
Silver		0.11	J	0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		16		0.50	1.0
Zinc		84		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	091SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 2345			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	053SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1358			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4100		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1633			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-120**

Lab Sample ID: 440-117992-25

Client Matrix: Solid

Date Sampled: 08/11/2015 1345

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.045		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-121**

Lab Sample ID: 440-117992-26

Client Matrix: Solid

Date Sampled: 08/11/2015 1340

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	101SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2103			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.45	J	0.27	1.0
Arsenic		2.3		0.25	0.50
Barium		89		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		ND		0.25	0.50
Chromium		14		0.50	1.0
Cobalt		2.8		0.21	0.50
Copper		33		0.50	1.0
Lead		250		0.25	0.50
Molybdenum		2.4		0.50	1.0
Nickel		10		0.50	1.0
Silver		ND		0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		12		0.50	1.0
Zinc		130		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	093SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 2351			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	055SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1404			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3100		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1640			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-121**

Lab Sample ID: 440-117992-26

Client Matrix: Solid

Date Sampled: 08/11/2015 1340

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.069		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-122**

Lab Sample ID: 440-117992-27

Client Matrix: Solid

Date Sampled: 08/11/2015 1335

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	102SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 2106			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.62	J	0.27	0.99
Arsenic		1.8		0.25	0.50
Barium		45		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.29	J	0.25	0.50
Chromium		9.8		0.50	0.99
Cobalt		2.6		0.21	0.50
Copper		22		0.50	0.99
Lead		88		0.25	0.50
Molybdenum		0.66	J	0.50	0.99
Nickel		6.3		0.50	0.99
Silver		ND		0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		15		0.50	0.99
Zinc		110		5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	094SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2353			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	056SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1406			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3000		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	08/19/2015 1643			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-122**

Lab Sample ID: 440-117992-27

Client Matrix: Solid

Date Sampled: 08/11/2015 1335

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.099		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-122-W**

Lab Sample ID: 440-117992-28
Client Matrix: Water

Date Sampled: 08/11/2015 1335
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	032SMPL.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1243			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	40	J	25	50
Antimony	5.0		1.0	2.5
Arsenic	7.4		0.50	1.0
Barium	170		0.50	1.0
Beryllium	ND		0.50	1.0
Cadmium	ND		0.25	0.50
Chromium	1.6	J	1.3	2.5
Cobalt	1.4		0.50	1.0
Copper	140		1.3	2.5
Lead	2.0		0.25	0.50
Molybdenum	71		0.50	1.0
Nickel	22	^	0.75	1.5
Selenium	ND UJ		1.5	3.0
Silver	ND		0.50	1.0
Thallium	ND		0.25	0.50
Vanadium	6.0		0.50	1.0
Zinc	61		10	25

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	4 mL
Analysis Date:	08/18/2015 1758			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00050	0.0010

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-123**

Lab Sample ID: 440-117992-29

Client Matrix: Solid

Date Sampled: 08/11/2015 1330

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	105SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2127			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	1.0
Arsenic		1.8		0.25	0.50
Barium		54		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		ND		0.25	0.50
Chromium		7.9		0.50	1.0
Cobalt		2.9		0.21	0.50
Copper		37		0.50	1.0
Lead		13		0.25	0.50
Molybdenum		0.96	J	0.50	1.0
Nickel		5.5		0.50	1.0
Silver		ND		0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		21		0.50	1.0
Zinc		73		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	097SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/18/2015 0001			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	059SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1414			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3900		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1645			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-123**

Lab Sample ID: 440-117992-29

Client Matrix: Solid

Date Sampled: 08/11/2015 1330

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.080		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-124**

Lab Sample ID: 440-117992-30
Client Matrix: Solid

Date Sampled: 08/11/2015 1315
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	095SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/16/2015 2045			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.32	J	0.27	0.99
Arsenic		1.9		0.25	0.50
Barium		58	~~F1~~	0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.25	J	0.25	0.50
Chromium		7.5		0.50	0.99
Cobalt		2.8		0.21	0.50
Copper		33	~~F1~~	0.50	0.99
Lead		16	~~F2 F1~~	0.25	0.50
Molybdenum		0.86	J	0.50	0.99
Nickel		5.3		0.50	0.99
Silver		ND		0.099	0.50
Thallium		ND		0.25	0.50
Vanadium		18		0.50	0.99
Zinc		81	~~F1~~	5.0	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	087SMPL.d
Dilution:	20			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 2335			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.25	J F1	0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	049SMPL.d
Dilution:	200			Initial Weight/Volume:	2.02 g
Analysis Date:	08/17/2015 1348			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3800		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274498	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1625			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-124**

Lab Sample ID: 440-117992-30

Client Matrix: Solid

Date Sampled: 08/11/2015 1315

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.041		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-125**

Lab Sample ID: 440-117992-31
Client Matrix: Solid

Date Sampled: 08/11/2015 1320
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	106SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2130			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.1 J		0.27	1.0
Arsenic		2.1		0.25	0.50
Barium		92		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.48	J	0.25	0.50
Chromium		110		0.50	1.0
Cobalt		3.4		0.21	0.50
Copper		170		0.50	1.0
Lead		86		0.25	0.50
Molybdenum		1.6		0.50	1.0
Nickel		13		0.50	1.0
Silver		0.13	J	0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		16		0.50	1.0
Zinc		340		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	098SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/18/2015 0004			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.43	J	0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	060SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1417			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3900		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1648			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-125**

Lab Sample ID: 440-117992-31

Client Matrix: Solid

Date Sampled: 08/11/2015 1320

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.055		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-126**

Lab Sample ID: 440-117992-32

Client Matrix: Solid

Date Sampled: 08/11/2015 1251

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	107SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2133			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	1.0
Arsenic		1.6		0.25	0.50
Barium		82		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		0.27	J	0.25	0.50
Chromium		16		0.50	1.0
Cobalt		6.4		0.21	0.50
Copper		26		0.50	1.0
Lead		130		0.25	0.50
Molybdenum		1.2		0.50	1.0
Nickel		7.3		0.50	1.0
Silver		ND		0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		27		0.50	1.0
Zinc		130		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	099SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/18/2015 0007			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	061SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1420			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3500		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1650			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-126**

Lab Sample ID: 440-117992-32

Client Matrix: Solid

Date Sampled: 08/11/2015 1251

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.034		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-126-W**

Lab Sample ID: 440-117992-33

Client Matrix: Water

Date Sampled: 08/11/2015 1251

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	025SMPL.d
Dilution:	2.0			Initial Weight/Volume:	25 mL
Analysis Date:	09/04/2015 1225			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	18	J	10	20
Antimony	1.1		0.40	1.0
Arsenic	6.8		0.20	0.40
Barium	98		0.20	0.40
Beryllium	ND		0.20	0.40
Cadmium	ND		0.10	0.20
Chromium	3.3		0.50	1.0
Cobalt	0.60		0.20	0.40
Copper	10		0.50	1.0
Lead	0.52		0.10	0.20
Molybdenum	9.3		0.20	0.40
Nickel	5.1	~~A~~	0.30	0.60
Selenium	ND UJ		0.60	1.2
Silver	ND		0.20	0.40
Thallium	ND		0.10	0.20
Vanadium	3.3		0.20	0.40
Zinc	9.4	J	4.0	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1749			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127**

Lab Sample ID: 440-117992-34

Client Matrix: Solid

Date Sampled: 08/11/2015 1224

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	108SMPL.d
Dilution:	20			Initial Weight/Volume:	2.04 g
Analysis Date:	08/16/2015 2135			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.26	0.98
Arsenic		1.8		0.25	0.49
Barium		32		0.25	0.49
Beryllium		ND		0.15	0.29
Cadmium		ND		0.25	0.49
Chromium		4.4		0.49	0.98
Cobalt		2.3		0.21	0.49
Copper		27		0.49	0.98
Lead		5.3		0.25	0.49
Molybdenum		ND		0.49	0.98
Nickel		3.3		0.49	0.98
Silver		ND		0.098	0.49
Thallium		ND		0.25	0.49
Vanadium		11		0.49	0.98
Zinc		35		4.9	9.8

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	100SMPL.d
Dilution:	20			Initial Weight/Volume:	2.04 g
Analysis Date:	08/18/2015 0010			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.98

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	062SMPL.d
Dilution:	200			Initial Weight/Volume:	2.04 g
Analysis Date:	08/17/2015 1422			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2800		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1653			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127**

Lab Sample ID: 440-117992-34

Client Matrix: Solid

Date Sampled: 08/11/2015 1224

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.090	J	0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127-W**

Lab Sample ID: 440-117992-35
Client Matrix: Water

Date Sampled: 08/11/2015 1224
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	040SMPL.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1303			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		25	50
Antimony	ND		1.0	2.5
Arsenic	12		0.50	1.0
Barium	130 J		0.50	1.0
Beryllium	0.52	J	0.50	1.0
Cadmium	ND		0.25	0.50
Chromium	1.6	J	1.3	2.5
Cobalt	1.5		0.50	1.0
Copper	4.9		1.3	2.5
Lead	0.90		0.25	0.50
Molybdenum	29 J		0.50	1.0
Nickel	5.7 J	~~A~~	0.75	1.5
Selenium	2.3	J	1.5	3.0
Silver	ND		0.50	1.0
Thallium	0.27	J	0.25	0.50
Vanadium	6.6 J		0.50	1.0
Zinc	15	J	10	25

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1751			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-128**

Lab Sample ID: 440-117992-36

Client Matrix: Solid

Date Sampled: 08/11/2015 1310

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	109SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 2138			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	0.99
Arsenic		0.96		0.25	0.49
Barium		33		0.25	0.49
Beryllium		ND		0.15	0.30
Cadmium		ND		0.25	0.49
Chromium		5.6		0.49	0.99
Cobalt		2.1		0.21	0.49
Copper		15		0.49	0.99
Lead		28		0.25	0.49
Molybdenum		0.54	J	0.49	0.99
Nickel		3.7		0.49	0.99
Silver		ND		0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		15		0.49	0.99
Zinc		58		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	101SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/18/2015 0012			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	063SMPL.d
Dilution:	200			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1425			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2700		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1655			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-128**

Lab Sample ID: 440-117992-36

Client Matrix: Solid

Date Sampled: 08/11/2015 1310

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.14		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-129**

Lab Sample ID: 440-117992-37

Client Matrix: Solid

Date Sampled: 08/11/2015 1325

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	110SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/16/2015 2141			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.5		0.27	0.99
Arsenic		7.5		0.25	0.49
Barium		230		0.25	0.49
Beryllium		0.56		0.15	0.30
Cadmium		1.5		0.25	0.49
Chromium		33		0.49	0.99
Cobalt		9.9		0.21	0.49
Copper		110		0.49	0.99
Lead		65		0.25	0.49
Molybdenum		3.4		0.49	0.99
Nickel		23		0.49	0.99
Silver		0.41	J	0.099	0.49
Thallium		ND		0.25	0.49
Vanadium		53		0.49	0.99
Zinc		570		4.9	9.9

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	102SMPL.d
Dilution:	20			Initial Weight/Volume:	2.03 g
Analysis Date:	08/18/2015 0015			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.89	J	0.20	0.99

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	064SMPL.d
Dilution:	2000			Initial Weight/Volume:	2.03 g
Analysis Date:	08/17/2015 1428			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		22000		250	490

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1657			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-129**

Lab Sample ID: 440-117992-37

Client Matrix: Solid

Date Sampled: 08/11/2015 1325

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.17		0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127D**

Lab Sample ID: 440-117992-38
Client Matrix: Solid

Date Sampled: 08/11/2015 1230
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	111SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2143			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.27	1.0
Arsenic		2.2		0.25	0.50
Barium		39		0.25	0.50
Beryllium		ND		0.15	0.30
Cadmium		ND		0.25	0.50
Chromium		5.2		0.50	1.0
Cobalt		2.2		0.21	0.50
Copper		23		0.50	1.0
Lead		6.5		0.25	0.50
Molybdenum		ND		0.50	1.0
Nickel		3.9		0.50	1.0
Silver		0.13	J	0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		13		0.50	1.0
Zinc		34		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	103SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/18/2015 0018			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	065SMPL.d
Dilution:	200			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1430			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3000		25	50

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1700			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127D**

Lab Sample ID: 440-117992-38

Client Matrix: Solid

Date Sampled: 08/11/2015 1230

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.030	J	0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127D-W**

Lab Sample ID: 440-117992-39

Client Matrix: Water

Date Sampled: 08/11/2015 1230

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	041SMPL.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1305			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		25	50
Antimony	ND		1.0	2.5
Arsenic	15		0.50	1.0
Barium	54 J		0.50	1.0
Beryllium	ND		0.50	1.0
Cadmium	ND		0.25	0.50
Chromium	10 J		1.3	2.5
Cobalt	1.8		0.50	1.0
Copper	6.2		1.3	2.5
Lead	1.3		0.25	0.50
Molybdenum	53 J		0.50	1.0
Nickel	9.3 J	~~A~~	0.75	1.5
Selenium	4.0		1.5	3.0
Silver	ND		0.50	1.0
Thallium	ND		0.25	0.50
Vanadium	9.8 J		0.50	1.0
Zinc	20	J	10	25

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1756			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118D**

Lab Sample ID: 440-117992-40

Client Matrix: Solid

Date Sampled: 08/11/2015 1425

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	112SMPL.d
Dilution:	20			Initial Weight/Volume:	2.04 g
Analysis Date:	08/16/2015 2146			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		ND		0.26	0.98
Arsenic		1.1	J	0.25	0.49
Barium		29	J	0.25	0.49
Beryllium		ND		0.15	0.29
Cadmium		ND		0.25	0.49
Chromium		4.4		0.49	0.98
Cobalt		1.9		0.21	0.49
Copper		19	J	0.49	0.98
Lead		12	J	0.25	0.49
Molybdenum		ND		0.49	0.98
Nickel		3.6		0.49	0.98
Silver		ND		0.098	0.49
Thallium		ND		0.25	0.49
Vanadium		10		0.49	0.98
Zinc		30		4.9	9.8

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	104SMPL.d
Dilution:	20			Initial Weight/Volume:	2.04 g
Analysis Date:	08/18/2015 0020			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		ND		0.20	0.98

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	066SMPL.d
Dilution:	200			Initial Weight/Volume:	2.04 g
Analysis Date:	08/17/2015 1433			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2700		25	49

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1707			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118D**

Lab Sample ID: 440-117992-40

Client Matrix: Solid

Date Sampled: 08/11/2015 1425

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.027	J	0.012	0.020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118D-W**

Lab Sample ID: 440-117992-41
Client Matrix: Water

Date Sampled: 08/11/2015 1425
Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	440-278409	Instrument ID:	ICPMS5
Prep Method:	3005A	Prep Batch:	440-278124	Lab File ID:	026SMPL.d
Dilution:	2.0			Initial Weight/Volume:	25 mL
Analysis Date:	09/04/2015 1227			Final Weight/Volume:	25 mL
Prep Date:	09/03/2015 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	41 J		10	20
Antimony	1.4		0.40	1.0
Arsenic	11		0.20	0.40
Barium	50 J		0.20	0.40
Beryllium	ND		0.20	0.40
Cadmium	ND		0.10	0.20
Chromium	1.1		0.50	1.0
Cobalt	2.2		0.20	0.40
Copper	11 J		0.50	1.0
Lead	2.4		0.10	0.20
Molybdenum	36 J		0.20	0.40
Nickel	23 J	A	0.30	0.60
Selenium	4.1		0.60	1.2
Silver	ND		0.20	0.40
Thallium	ND		0.10	0.20
Vanadium	12 J		0.20	0.40
Zinc	45 J		4.0	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	440-274516	Instrument ID:	CV-HG2
Prep Method:	7470A	Prep Batch:	440-273924	Lab File ID:	150818-2b.prn
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	08/18/2015 1753			Final Weight/Volume:	20 mL
Prep Date:	08/17/2015 1838				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	ND		0.00010	0.00020

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-109D**

Lab Sample ID: 440-117992-42

Client Matrix: Solid

Date Sampled: 08/11/2015 1505

Date Received: 08/12/2015 1700

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	440-273869	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	113SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/16/2015 2149			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		2.3		0.27	1.0
Arsenic		7.7		0.25	0.50
Barium		290		0.25	0.50
Beryllium		0.63		0.15	0.30
Cadmium		2.1		0.25	0.50
Chromium		37		0.50	1.0
Cobalt		11		0.21	0.50
Copper		140		0.50	1.0
Lead		100		0.25	0.50
Molybdenum		5.4		0.50	1.0
Nickel		28		0.50	1.0
Silver		0.66		0.10	0.50
Thallium		ND		0.25	0.50
Vanadium		57		0.50	1.0
Zinc		840		5.0	10

Analysis Method:	6020	Analysis Batch:	440-273987	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	105SMPL.d
Dilution:	20			Initial Weight/Volume:	2.01 g
Analysis Date:	08/18/2015 0023			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		1.1		0.20	1.0

Analysis Method:	6020	Analysis Batch:	440-273866	Instrument ID:	ICPMS4
Prep Method:	3050B	Prep Batch:	440-273420	Lab File ID:	067SMPL.d
Dilution:	2000			Initial Weight/Volume:	2.01 g
Analysis Date:	08/17/2015 1436			Final Weight/Volume:	50 mL
Prep Date:	08/15/2015 0726				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		21000		250	500

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	440-274529	Instrument ID:	CV-HG2
Prep Method:	7471A	Prep Batch:	440-274229	Lab File ID:	150819-1a.prn
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	08/19/2015 1710			Final Weight/Volume:	50 mL
Prep Date:	08/18/2015 2008				

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-109D**

Lab Sample ID: 440-117992-42

Client Matrix: Solid

Date Sampled: 08/11/2015 1505

Date Received: 08/12/2015 1700

7471A Mercury (CVAA)

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.35 J		0.012	0.020

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Site Name: **Exide Vernon** **Metals**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Analyzed Date	Analysis Hold Time (days)	Days to Analysis	Qualify
440-117992-01	P-100	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-02	P-101	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-03	P-102	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-05	P-103	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-06	P-104	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-07	P-105	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-08	P-106	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-09	P-107	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-10	P-108	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-11	P-109	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-42	P-109D	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-12	P-110	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-13	P-111	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-14	P-112	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-16	P-113	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-16	P-113	Sediment	Total Metals (Reanalysis)	8/11/2015	9/1/2015	180	21.0	
440-117992-16	P-113	Sediment	Total Metals (Reanalysis)	8/11/2015	9/9/2015	180	29.0	
440-117992-16	P-113	Sediment	Total Metals (Reanalysis)	8/11/2015	9/9/2015	180	29.0	
440-117992-17	P-114	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-18	P-115	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-19	P-116	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-20	P-117	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-21	P-118	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-40	P-118D	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-23	P-119	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-25	P-120	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-26	P-121	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-27	P-122	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-29	P-123	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-30	P-124	Sediment	Total Metals	8/11/2015	8/17/2015	180	6.0	
440-117992-31	P-125	Sediment	Total Metals	8/11/2015	8/18/2015	180	7.0	
440-117992-32	P-126	Sediment	Total Metals	8/11/2015	8/18/2015	180	7.0	
440-117992-34	P-127	Sediment	Total Metals	8/11/2015	8/18/2015	180	7.0	
440-117992-38	P-127D	Sediment	Total Metals	8/11/2015	8/18/2015	180	7.0	
440-117992-36	P-128	Sediment	Total Metals	8/11/2015	8/18/2015	180	7.0	
440-117992-37	P-129	Sediment	Total Metals	8/11/2015	8/18/2015	180	7.0	
440-117992-04	P-102W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-15	P-112W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-22	P-118W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-41	P-118D-W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-24	P-119W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-28	P-122W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-33	P-126W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-35	P-127W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-39	P-127D-W	Pore Water	Dissolved Metals	8/11/2015	9/4/2015	180	24.0	
440-117992-01	P-100	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-02	P-101	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-03	P-102	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	

AG
9/17/2015

Site Name: **Exide Vernon** **Metals**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Analyzed Date	Analysis Hold Time (days)	Days to Analysis	Qualify
440-117992-05	P-103	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-06	P-104	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-07	P-105	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-08	P-106	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-09	P-107	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-10	P-108	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-11	P-109	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-42	P-109D	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-12	P-110	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-13	P-111	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-14	P-112	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-16	P-113	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-17	P-114	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-18	P-115	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-19	P-116	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-20	P-117	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-21	P-118	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-40	P-118D	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-23	P-119	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-25	P-120	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-26	P-121	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-27	P-122	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-29	P-123	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-30	P-124	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-31	P-125	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-32	P-126	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-34	P-127	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-38	P-127D	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-36	P-128	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-37	P-129	Sediment	Mercury	8/11/2015	8/19/2015	28	8.0	
440-117992-04	P-102W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-15	P-112W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-22	P-118W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-41	P-118D-W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-24	P-119W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-28	P-122W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-33	P-126W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-35	P-127W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	
440-117992-39	P-127D-W	Pore Water	Mercury, Dissolved	8/11/2015	8/18/2015	28	7.0	

AKG
9/17/2015

BLANKS
Water blank to soil

Blank ID	Analyte	% Solids (decimal)	Dilution Factor	Extract Volume (L)	Weight (g)	Blank Conc	Units	Corrected Blank	Blank*10 or Blank*5	Units	Sample ID	Sample Conc	Units	Qualify
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.02	0.000578	mg/l	0.2861	1.43069	mg/kg	P-100	1.4	mg/Kg	*
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.00	0.000578	mg/l	0.2890	1.44500	mg/kg	P-101	0.29	mg/Kg	*
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.02	0.000578	mg/l	0.2861	1.43069	mg/kg	P-103	0.47	mg/Kg	*
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.03	0.000578	mg/l	0.2847	1.42365	mg/kg	P-104	0.27	mg/Kg	*
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.03	0.000578	mg/l	0.2847	1.42365	mg/kg	P-106	0.42	mg/Kg	*
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.03	0.000578	mg/l	0.2847	1.42365	mg/kg	P-109	0.37	mg/Kg	*
CCB 440-27869/26	Antimony	1.0	20.0	0.05	2.01	0.000578	mg/l	0.2876	1.43781	mg/kg	P-110	0.33	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.01	0.000564	mg/l	0.2806	1.40299	mg/kg	P-111	0.94	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.03	0.000564	mg/l	0.2778	1.38916	mg/kg	P-113	0.64	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.00	0.000564	mg/l	0.2820	1.41000	mg/kg	P-114	0.38	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.02	0.000564	mg/l	0.2792	1.39604	mg/kg	P-119	4.5	mg/Kg	
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.01	0.000564	mg/l	0.2806	1.40299	mg/kg	P-120	0.46	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.01	0.000564	mg/l	0.2806	1.40299	mg/kg	P-121	0.45	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.02	0.000564	mg/l	0.2792	1.39604	mg/kg	P-122	0.62	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.01	0.000564	mg/l	0.2806	1.40299	mg/kg	P-124	0.32	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.01	0.000564	mg/l	0.2806	1.40299	mg/kg	P-125	1.1	mg/Kg	*
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.03	0.000564	mg/l	0.2778	1.38916	mg/kg	P-129	1.5	mg/Kg	
ICB 440-273869/8	Antimony	1.0	20.0	0.05	2.01	0.000564	mg/l	0.2806	1.40299	mg/kg	P-109D	2.3	mg/Kg	
CCB 440-278998/28	Lead	1.0	20.0	0.05	2.03	0.000794	mg/l	0.3911	1.95567	mg/kg	P-113	25	mg/Kg	
CCB 440-278998/28	Lead	1.0	20.0	0.05	2.03	0.000794	mg/l	0.3911	1.95567	mg/kg	P-113	1500	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.02	0.000661	mg/l	0.3272	1.63614	mg/kg	P-100	9.4	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.00	0.000661	mg/l	0.3305	1.65250	mg/kg	P-101	16	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.03	0.000661	mg/l	0.3256	1.62808	mg/kg	P-102	14	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.02	0.000661	mg/l	0.3272	1.63614	mg/kg	P-103	66	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.03	0.000661	mg/l	0.3256	1.62808	mg/kg	P-104	24	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.01	0.000661	mg/l	0.3289	1.64428	mg/kg	P-105	7	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.03	0.000661	mg/l	0.3256	1.62808	mg/kg	P-106	8.8	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.02	0.000661	mg/l	0.3272	1.63614	mg/kg	P-107	7.3	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.00	0.000661	mg/l	0.3305	1.65250	mg/kg	P-108	28	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.03	0.000661	mg/l	0.3256	1.62808	mg/kg	P-109	30	mg/Kg	
CCB 440-273869/26	Nickel	1.0	20.0	0.05	2.01	0.000661	mg/l	0.3289	1.64428	mg/kg	P-110	11	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.01	0.000631	mg/l	0.3139	1.56965	mg/kg	P-111	28	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.03	0.000631	mg/l	0.3108	1.55419	mg/kg	P-112	7.8	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.03	0.000631	mg/l	0.3108	1.55419	mg/kg	P-113	9.9	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.00	0.000631	mg/l	0.3155	1.57750	mg/kg	P-114	23	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.03	0.000631	mg/l	0.3108	1.55419	mg/kg	P-115	7.6	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.02	0.000631	mg/l	0.3124	1.56188	mg/kg	P-116	16	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.03	0.000631	mg/l	0.3108	1.55419	mg/kg	P-117	7.3	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.02	0.000631	mg/l	0.3124	1.56188	mg/kg	P-118	3.5	mg/Kg	
CCB 440-273869/37	Nickel	1.0	20.0	0.05	2.02	0.000631	mg/l	0.3124	1.56188	mg/kg	P-119	13	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.01	0.000619	mg/l	0.3080	1.53980	mg/kg	P-120	5.5	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.01	0.000619	mg/l	0.3080	1.53980	mg/kg	P-121	10	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.02	0.000619	mg/l	0.3064	1.53218	mg/kg	P-122	6.3	mg/Kg	
CCB 440-273869/62	Nickel	1.0	20.0	0.05	2.01	0.000605	mg/l	0.3010	1.50498	mg/kg	P-123	5.5	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.02	0.000619	mg/l	0.3064	1.53218	mg/kg	P-124	5.3	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.01	0.000605	mg/l	0.3010	1.50498	mg/kg	P-125	13	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.01	0.000605	mg/l	0.3010	1.50498	mg/kg	P-126	7.3	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.04	0.000605	mg/l	0.2966	1.48284	mg/kg	P-127	3.3	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.03	0.000605	mg/l	0.2980	1.49015	mg/kg	P-128	3.7	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.03	0.000605	mg/l	0.2980	1.49015	mg/kg	P-129	23	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.01	0.000605	mg/l	0.3010	1.50498	mg/kg	P-127D	3.9	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.04	0.000605	mg/l	0.2966	1.48284	mg/kg	P-118D	3.6	mg/Kg	
CCB 440-273869/50	Nickel	1.0	20.0	0.05	2.01	0.000605	mg/l	0.3010	1.50498	mg/kg	P-109D	28	mg/Kg	

* Sample Concentration is < 10X (or 5X) blank concentration, Qualified as "U"

AKG
9/17/2015

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-273869/8 08/16/2015 15:10		CCB 440-273869/16 08/16/2015 16:53		CCB 440-273869/26 08/16/2015 17:38		CCB 440-273869/37 08/16/2015 18:07	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	* 0.564	J	ND		** 0.578	J	ND	
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Molybdenum	2.0	ND		ND		ND		ND	
Nickel	2.0	ND		*** 0.624	J	*** 0.661	J	*** 0.631	J
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	
Aluminum	10	ND		ND		ND		ND	

* ICB > MDL, associated samples include P-111, P-113, P-114, P-119, P-120, P-121, P-122, P-124, P-125, P-129 and P-109D. (J)

** CCB >MDL, associated samples include P-100, P-101, P-103, P-104, P-106, P-109 and P-110 (J)

*** FYI CCB >MDL, associated samples include P-100, P-101, P-102, P-103, P-104, P-106, P-109, P-110, P-111, P-113, P-114, P-119, P-120, P-121, P-122, P-124, P-125, P-129 and P-109D. All bracketing sample results were >10X CCB result.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 440-273869/48 08/16/2015 18:38		CCB 440-273869/50 08/16/2015 20:37		CCB 440-273869/62 08/16/2015 21:11		CCB 440-273869/73 08/16/2015 21:54	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		ND		ND		ND	
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Molybdenum	2.0	ND		ND		ND		ND	
Nickel	2.0	*** 0.599	J	*** 0.619	J	*** 0.605	J	*** 0.601	J
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	
Aluminum	10	ND		ND		ND		ND	

*** FYI CCB >MDL, associated samples include P-100, P-101, P-102, P-103, P-104, P-106, P-109, P-110, P-111, P-113, P-114, P-119, P-120, P-121, P-122, P-124, P-125, P-129 and P-109D. All bracketing sample concentrations were >10X CCB concentration.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-273866/8 08/17/2015 11:54		CCB 440-273866/26 08/17/2015 12:42		CCB 440-273866/38 08/17/2015 13:18		CCB 440-273866/46 08/17/2015 13:40	
		Found	C	Found	C	Found	C	Found	C
Aluminum	10	ND		ND		ND		ND	
Antimony	2.0	* 0.767	J	* 0.776	J	* 0.799	J	* 0.814	J
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Molybdenum	2.0	ND		ND		ND		ND	
Nickel	2.0	ND		ND		ND		ND	
Selenium	2.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	

* FYI CCB >MDL, no bracketing samples analyzed for Antimony.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 440-273866/58 08/17/2015 14:12		CCB 440-273866/69 08/17/2015 14:41					
		Found	C	Found	C	Found	C	Found	C
Aluminum	10	ND		ND					
Antimony	2.0	* 0.796	J	* 0.793	J				
Arsenic	1.0	ND		ND					
Barium	1.0	ND		ND					
Cadmium	1.0	ND		ND					
Chromium	2.0	ND		ND					
Cobalt	1.0	ND		ND					
Copper	2.0	ND		ND					
Lead	1.0	ND		ND					
Molybdenum	2.0	ND		ND					
Nickel	2.0	ND		ND					
Selenium	2.0	ND		* 0.524	J				
Silver	1.0	ND		ND					
Thallium	1.0	ND		ND					
Vanadium	2.0	ND		ND					
Zinc	20	ND		ND					
Beryllium	0.50	ND		ND					

* FYI CCB >MDL, no bracketing samples analyzed for Antimony or Selenium.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-273987/8 08/17/2015 19:38		CCB 440-273987/16 08/17/2015 21:58		CCB 440-273987/28 08/17/2015 22:30		CCB 440-273987/40 08/17/2015 23:02	
		Found	C	Found	C	Found	C	Found	C
Selenium	2.0	ND		ND		ND		ND	
Aluminum	10	ND		ND		ND		ND	
Antimony	2.0	* 0.999	J	* 0.665	J	* 1.01	J	* 0.971	J
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		* 0.788	J
Molybdenum	2.0	ND		ND		* 0.519	J	ND	
Nickel	2.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

* FYI CCB >MDL, no bracketing samples analyzed for Antimony, Lead or Molybdenum.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 440-273987/48 08/17/2015 23:27		CCB 440-273987/60 08/17/2015 23:59		CCB 440-273987/71 08/18/2015 00:28			
		Found	C	Found	C	Found	C	Found	C
Selenium	2.0	ND		ND		ND			
Aluminum	10	ND		ND		ND			
Antimony	2.0	0.981	J	0.982	J	0.975	J		
Arsenic	1.0	ND		ND		ND			
Barium	1.0	ND		ND		ND			
Beryllium	0.50	ND		ND		ND			
Cadmium	1.0	ND		ND		ND			
Chromium	2.0	ND		ND		ND			
Cobalt	1.0	ND		ND		ND			
Copper	2.0	ND		ND		ND			
Lead	1.0	ND		ND		ND			
Molybdenum	2.0	ND		0.503	J	ND			
Nickel	2.0	ND		ND		ND			
Silver	1.0	ND		ND		ND			
Thallium	1.0	ND		ND		ND			
Vanadium	2.0	ND		ND		ND			
Zinc	20	ND		ND		ND			

* FYI CCB >MDL, no bracketing samples analyzed for Antimony or Molybdenum.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-278998/10 09/09/2015 10:05		CCB 440-278998/18 09/09/2015 11:24		CCB 440-278998/28 09/09/2015 11:51			
		Found	C	Found	C	Found	C	Found	C
Lead	1.0	ND		ND		** 0.794	J		
Aluminum	10	ND		ND		ND			
Antimony	2.0	ND		ND		* 0.537	J		
Arsenic	1.0	ND		ND		ND			
Barium	1.0	ND		ND		ND			
Beryllium	0.50	ND		ND		ND			
Cadmium	1.0	ND		ND		ND			
Chromium	2.0	ND		ND		ND			
Cobalt	1.0	ND		ND		ND			
Copper	2.0	ND		* 0.557	J	ND			
Molybdenum	2.0	ND		ND		ND			
Nickel	2.0	ND		ND		ND			
Selenium	2.0	ND		ND		ND			
Silver	1.0	ND		ND		ND			
Thallium	1.0	ND		ND		ND			
Vanadium	2.0	ND		ND		ND			
Zinc	20	ND		ND		ND			

* FYI CCB >MDL, no bracketing samples analyzed for Antimony or Copper.

** CCB >MDL, associated samples include P-113. Sample concentration >10X CCB concentration.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 440-278409/43 09/04/2015 13:10							
		Found	C	Found	C	Found	C	Found	C
Aluminum	10	ND							
Antimony	0.50	ND							
Arsenic	0.20	ND							
Barium	0.20	ND							
Beryllium	0.20	*0.113	J						
Cadmium	0.10	ND							
Chromium	0.50	ND							
Cobalt	0.20	ND							
Copper	0.50	ND							
Lead	0.10	ND							
Molybdenum	0.20	ND							
Nickel	0.30	ND							
Selenium	0.60	ND							
Silver	0.20	ND							
Thallium	0.10	ND							
Vanadium	0.20	ND							
Zinc	5.0	ND							

* FYI CCB >MDL, associated samples include P-102-W, P-112-W, P-118-W, P-119-W, P-122-W, P-126-W, P-127D-W and P-118D-W. All samples concentrations ND.

AKG
9/17/2015

Italicized analytes were not requested for this sequence.

440-117992_Field Duplicate.xls
Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Aluminum	mg/Kg	18000		490		
P-109D	Aluminum	mg/Kg	21000		500	15.38	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-109	Antimony	mg/Kg	0.37	J	0.99		
P-109D	Antimony	mg/Kg	2.3		1	1.93	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Arsenic	mg/Kg	8.2		0.49		
P-109D	Arsenic	mg/Kg	7.7		0.5	6.29	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Barium	mg/Kg	320		0.49		
P-109D	Barium	mg/Kg	290		0.5	9.84	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-109	Beryllium	mg/Kg	0.68		0.3		
P-109D	Beryllium	mg/Kg	0.63		0.3	0.05	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-109	Cadmium	mg/Kg	2.3		0.49		
P-109D	Cadmium	mg/Kg	2.1		0.5	0.20	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Chromium	mg/Kg	36		0.99		
P-109D	Chromium	mg/Kg	37		1	2.74	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Cobalt	mg/Kg	11		0.49		
P-109D	Cobalt	mg/Kg	11		0.5	0.00	no

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440-117992_Field Duplicate.xls
Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Copper	mg/Kg	150		0.99		
P-109D	Copper	mg/Kg	140		1	6.90	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Lead	mg/Kg	110		0.49		
P-109D	Lead	mg/Kg	100		0.5	9.52	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Mercury	mg/Kg	0.23		0.02		
P-109D	Mercury	mg/Kg	0.35		0.02	41.38	yes

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Molybdenum	mg/Kg	5.7		0.99		
P-109D	Molybdenum	mg/Kg	5.4		1	5.41	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Nickel	mg/Kg	30		0.99		
P-109D	Nickel	mg/Kg	28		1	6.90	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-109	Selenium	mg/Kg	1.3		0.99		
P-109D	Selenium	mg/Kg	1.1		1	0.20	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-109	Silver	mg/Kg	0.44	J	0.49		
P-109D	Silver	mg/Kg	0.66		0.5	0.22	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-109	Thallium	mg/Kg	0.27	J	0.49		
P-109D	Thallium	mg/Kg		U	0.5	0.27	no

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Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Vanadium	mg/Kg	55		0.99		
P-109D	Vanadium	mg/Kg	57		1	3.57	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Zinc	mg/Kg	900		9.9		
P-109D	Zinc	mg/Kg	840		10	6.90	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Aluminum	mg/Kg	3000		50		
P-118D	Aluminum	mg/Kg	2700		49	10.53	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118	Arsenic	mg/Kg	2.2		0.5		
P-118D	Arsenic	mg/Kg	1.1		0.49	1.10	yes

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Barium	mg/Kg	46		0.5		
P-118D	Barium	mg/Kg	29		0.49	45.33	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118	Chromium	mg/Kg	4.5		0.99		
P-118D	Chromium	mg/Kg	4.4		0.98	0.10	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Cobalt	mg/Kg	2.6		0.5		
P-118D	Cobalt	mg/Kg	1.9		0.49	31.11	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Copper	mg/Kg	32		0.99		
P-118D	Copper	mg/Kg	19		0.98	50.98	yes

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Total Metals

Site Name: EXIDE VERNON
Project Number: 2013-2993
Laboratory: TA Irvine
Matrix: Sediment

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Lead	mg/Kg	4.3		0.5		
P-118D	Lead	mg/Kg	12		0.49	94.48	yes

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Mercury	mg/Kg	0.36		0.02		
P-118D	Mercury	mg/Kg	0.027		0.02	172.09	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118	Molybdenum	mg/Kg	0.52	J	0.99		
P-118D	Molybdenum	mg/Kg		U	0.98	0.52	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118	Nickel	mg/Kg	3.5		0.99		
P-118D	Nickel	mg/Kg	3.6		0.98	0.10	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Vanadium	mg/Kg	12		0.99		
P-118D	Vanadium	mg/Kg	10		0.98	18.18	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118	Zinc	mg/Kg	38		9.9		
P-118D	Zinc	mg/Kg	30		9.8	8.00	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Aluminum	mg/Kg	2800		49		
P-127D	Aluminum	mg/Kg	3000		50	6.90	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Arsenic	mg/Kg	1.8		0.49		
P-127D	Arsenic	mg/Kg	2.2		0.5	0.40	no

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Total Metals

Site Name: EXIDE VERNON
Project Number: 2013-2993
Laboratory: TA Irvine
Matrix: Sediment

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Barium	mg/Kg	32		0.49		
P-127D	Barium	mg/Kg	39		0.5	19.72	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Chromium	mg/Kg	4.4		0.98		
P-127D	Chromium	mg/Kg	5.2		1	0.80	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Cobalt	mg/Kg	2.3		0.49		
P-127D	Cobalt	mg/Kg	2.2		0.5	0.10	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Copper	mg/Kg	27		0.98		
P-127D	Copper	mg/Kg	23		1	16.00	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Copper	mg/Kg	27		0.98		
P-127D	Copper	mg/Kg	23		1	16.00	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Lead	mg/Kg	5.3		0.49		
P-127D	Lead	mg/Kg	6.5		0.5	20.34	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Mercury	mg/Kg	0.09		0.02		
P-127D	Mercury	mg/Kg	0.03		0.02	0.06	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Nickel	mg/Kg	3.3		0.98		
P-127D	Nickel	mg/Kg	3.9		1	0.60	no

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440-117992_Field Duplicate.xls
Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Silver	mg/Kg		U	0.49		
P-127D	Silver	mg/Kg	0.13	J	0.5	0.13	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Vanadium	mg/Kg	11		0.98		
P-127D	Vanadium	mg/Kg	13		1	16.67	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Zinc	mg/Kg	35		9.8		
P-127D	Zinc	mg/Kg	34		10	1.00	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118D-W	Aluminum, Dissolved	ug/L	41		20		
P-118W	Aluminum, Dissolved	ug/L	11	J	20	30.00	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118D-W	Antimony, Dissolved	ug/L	1.4		1		
P-118W	Antimony, Dissolved	ug/L	0.92	J	1	0.48	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Arsenic, Dissolved	ug/L	11		0.4		
P-118W	Arsenic, Dissolved	ug/L	8.9		0.4	21.11	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Barium, Dissolved	ug/L	50		0.4		
P-118W	Barium, Dissolved	ug/L	78		0.4	43.75	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118D-W	Chromium, Dissolved	ug/L	1.1		1		
P-118W	Chromium, Dissolved	ug/L	0.78	J	1	0.32	no

9/17/2015

440-117992_Field Duplicate.xls
Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Cobalt, Dissolved	ug/L	2.2		0.4		
P-118W	Cobalt, Dissolved	ug/L	1.7		0.4	25.64	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Copper, Dissolved	ug/L	11		1		
P-118W	Copper, Dissolved	ug/L	7.2		1	41.76	yes

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Lead, Dissolved	ug/L	2.4		0.2		
P-118W	Lead, Dissolved	ug/L	2		0.2	18.18	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Molybdenum, Dissolved	ug/L	36		0.4		
P-118W	Molybdenum, Dissolved	ug/L	22		0.4	48.28	yes

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Nickel, Dissolved	ug/L	23	^	0.6		
P-118W	Nickel, Dissolved	ug/L	12	^	0.6	62.86	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118D-W	Selenium, Dissolved	ug/L	4.1		1.2		
P-118W	Selenium, Dissolved	ug/L	3.3		1.2	0.80	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Vanadium, Dissolved	ug/L	12		0.4		
P-118W	Vanadium, Dissolved	ug/L	5.9		0.4	68.16	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-118D-W	Zinc, Dissolved	ug/L	45		10		
P-118W	Zinc, Dissolved	ug/L	24		10	21.00	yes

9/17/2015

440-117992_Field Duplicate.xls
Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127D-W	Arsenic, Dissolved	ug/L	15		1		
P-127W	Arsenic, Dissolved	ug/L	12		1	22.22	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127D-W	Barium, Dissolved	ug/L	54		1		
P-127W	Barium, Dissolved	ug/L	130		1	82.61	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Beryllium, Dissolved	ug/L		U	1		
P-127W	Beryllium, Dissolved	ug/L	0.52	J	1	0.52	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Chromium, Dissolved	ug/L	10		2.5		
P-127W	Chromium, Dissolved	ug/L	1.6	J	2.5	8.40	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Cobalt, Dissolved	ug/L	1.8		1		
P-127W	Cobalt, Dissolved	ug/L	1.5		1	0.30	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Copper, Dissolved	ug/L	6.2		2.5		
P-127W	Copper, Dissolved	ug/L	4.9		2.5	1.30	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Lead, Dissolved	ug/L	1.3		0.5		
P-127W	Lead, Dissolved	ug/L	0.9		0.5	0.40	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127D-W	Molybdenum, Dissolved	ug/L	53		1		
P-127W	Molybdenum, Dissolved	ug/L	29		1	58.54	yes

9/17/2015

440-117992_Field Duplicate.xls
Total Metals

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127D-W	Nickel, Dissolved	ug/L	9.3	^	1.5		
P-127W	Nickel, Dissolved	ug/L	5.7	^	1.5	48.00	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Selenium, Dissolved	ug/L	4		3		
P-127W	Selenium, Dissolved	ug/L	2.3	J	3	1.70	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Thallium, Dissolved	ug/L		U	0.5		
P-127W	Thallium, Dissolved	ug/L	0.27	J	0.5	0.27	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127D-W	Vanadium, Dissolved	ug/L	9.8		1		
P-127W	Vanadium, Dissolved	ug/L	6.6		1	39.02	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Zinc, Dissolved	ug/L	20	J	25		
P-127W	Zinc, Dissolved	ug/L	15	J	25	5.00	no

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

*** - Denotes %RPD or difference outside criteria.**

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

AKG
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Blank ID	Date	Analyte	RL Conc	RL*10 or RL*5	Units	Samples	Sample Conc	Units	Qualify
CRI 440-278409/18	9/4/2015	Aluminum, Dissolved	0.2	1.00	ug/L	P-102W	48	ug/L	
CRI 440-278409/18	9/4/2015	Aluminum, Dissolved	0.2	1.00	ug/L	P-112W	21	ug/L	
CRI 440-278409/18	9/4/2015	Aluminum, Dissolved	0.2	1.00	ug/L	P-118W	11	ug/L	
CRI 440-278409/18	9/4/2015	Aluminum, Dissolved	0.2	1.00	ug/L	P-122W	40	ug/L	
CRI 440-278409/18	9/4/2015	Aluminum, Dissolved	0.2	1.00	ug/L	P-126W	18	ug/L	
CRI 440-278409/18	9/4/2015	Aluminum, Dissolved	0.2	1.00	ug/L	P-118WD	41	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-102W	6.8	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-112W	24	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-118W	12	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-119W	17	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-122W	22	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-126W	5.1	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-127W	5.7	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-127WD	9.3	ug/L	
CRI 440-278409/18	9/4/2015	Nickel, Dissolved	0.2	1.00	ug/L	P-118WD	23	ug/L	
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-102W		ug/L	*
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-112W	7.1	ug/L	
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-118W	3.3	ug/L	
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-119W	1.5	ug/L	
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-122W		ug/L	*
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-126W		ug/L	*
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-127W	2.3	ug/L	
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-127WD	4	ug/L	
CRI 440-278409/18	9/4/2015	Selenium, Dissolved	0.2	1.00	ug/L	P-118WD	4.1	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-102W	25	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-112W	54	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-118W	24	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-119W	22	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-122W	61	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-126W	9.4	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-127W	15	ug/L	
CRI 440-278409/18	9/4/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-127WD	20	ug/L	
CRI 440-278409/18	9/5/2015	Zinc, Dissolved	0.2	1.00	ug/L	P-118WD	45	ug/L	

* Sample concentration is < 5X reporting limit concentration, Qualified as "J" or CRDL Recovery <50% and sample results ND (UJ).

AKG
9/17/2015

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Method: 6020 Instrument ID: ICPMS5

Lab Sample ID: CRI 440-277670/10 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS4_CRI_00614

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Lead	1.00	1.03		103	50-150

Lab Sample ID: CRI 440-277670/11 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS4_CRI2_00605

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Lead	2.00	1.99		99	50-150

Lab Sample ID: CRI 440-278409/18 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS4 STD1_00817

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	ND		* 308	50-150
Antimony	0.200	ND		** 50	50-150
Arsenic	0.200	0.194	J	97	50-150
Barium	0.200	0.193	J	97	50-150
Beryllium	0.200	0.192	J	96	50-150
Cadmium	0.200	0.202		101	50-150
Chromium	0.200	ND		93	50-150
Cobalt	0.200	0.201		101	50-150
Copper	0.200	ND		105	50-150
Lead	0.200	0.194		97	50-150
Molybdenum	0.200	0.192	J	96	50-150
Nickel	0.200	0.303	^	* 152	50-150
Selenium	0.200	ND		** 14	50-150
Silver	0.200	0.189	J	95	50-150
Thallium	0.200	0.197		99	50-150
Vanadium	0.200	0.187	J	94	50-150
Zinc	0.200	ND		* 233	50-150

* CRDL recovery > 150%, associated samples include P-102-W, P-112-W, P-118-W, P-119-W, P-122-W, P-126-W, P-127-W, P-127D-W and P-118D-W.

** CRDL recovery <50%, associated samples include P-102-W, P-112-W, P-118-W, P-119-W, P-122-W, P-126-W, P-127-W, P-127D-W and P-118D-W. (UJ)

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

AKG 9/1/2015

FORM IIB-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: P-105 MS | Lab ID: 440-117992-7 MS

Lab Name: TestAmerica Irvine | Job No.: 440-117992-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	5340		4000		49.8	* 2729	80-120	4	6020
Antimony	46.6		ND		49.8	94	80-120		6020
Arsenic	55.5		1.8		49.8	108	80-120		6020
Barium	149		80		49.8	** 138	80-120	F1	6020
Beryllium	48.4		ND		49.8	97	80-120		6020
Cadmium	52.6		0.37	J	49.8	105	80-120		6020
Chromium	60.6		8.0		49.8	106	80-120		6020
Cobalt	55.2		3.3		49.8	104	80-120		6020
Copper	76.6		55		49.8	*** 44	80-120	F1	6020
Lead	77.6		32		49.8	91	80-120		6020
Molybdenum	55.0		1.1		49.8	108	80-120		6020
Nickel	57.4		7.0		49.8	101	80-120		6020
Selenium	46.6		0.23	J	49.8	93	80-120		6020
Silver	25.3		ND		24.9	102	80-120		6020
Thallium	52.5		ND		49.8	106	80-120		6020
Vanadium	72.2		15		49.8	116	80-120		6020
Zinc	155		100		49.8	105	80-120		6020
Mercury	0.851		0.040		0.784	103	70-130		7471A

SSR = Spiked Sample Result

* FYI MS Recoveries > 125%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. Sample concentration >4X spike concentration.

**MS Recovery >125%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. (J)

***MS Recovery <75%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. (UJ/J)

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: P-105 MSD

Lab ID: 440-117992-7 MSD

Lab Name: TestAmerica Irvine

Job No.: 440-117992-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	5070		50.0	* 2187	80-120	5	20	4	6020
Antimony	50.5		50.0	101	80-120	8	20		6020
Arsenic	56.6		50.0	110	80-120	2	20		6020
Barium	145		50.0	** 129	80-120	3	20	F1	6020
Beryllium	51.2		50.0	102	80-120	6	20		6020
Cadmium	55.8		50.0	111	80-120	6	20		6020
Chromium	64.6		50.0	113	80-120	6	20		6020
Cobalt	57.1		50.0	108	80-120	3	20		6020
Copper	91.9		50.0	*** 74	80-120	18	20	F1	6020
Lead	135		50.0	** 207	80-120	54	20	F1 F2	6020
Molybdenum	58.6		50.0	115	80-120	6	20		6020
Nickel	60.2		50.0	106	80-120	5	20		6020
Selenium	48.1		50.0	96	80-120	3	20		6020
Silver	26.9		25.0	108	80-120	6	20		6020
Thallium	55.3		50.0	111	80-120	5	20		6020
Vanadium	74.6		50.0	120	80-120	3	20		6020
Zinc	148		50.0	89	80-120	5	20		6020
Mercury	0.832		0.784	101	70-130	2	20		7471A

SDR = Sample Duplicate Result

* FYI MSD Recoveries > 125%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. Sample concentration >4X spike concentration.

**MSD Recovery >125%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. (J)

***MSD Recovery <75%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. (UJ/J)

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VD - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: P-113 MS

Lab ID: 440-117992-16 MS

Lab Name: TestAmerica Irvine

Job No.: 440-117992-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Lead	1120		1500		49.5	*-778	80-120	4	6020

SSR = Spiked Sample Result

* FYI MS Recoveries > 125%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. Sample concentration >4X spike concentration.

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: P-113 MSD

Lab ID: 440-117992-16 MSD

Lab Name: TestAmerica Irvine

Job No.: 440-117992-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Lead	1160		50.0	-694	80-120	3	20	4	6020
Lead	76.6		50.0	95	80-120	2	20		6020

SDR = Sample Duplicate Result

* FYI MSD Recoveries > 125%, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118 and P-119. Sample concentration >4X spike concentration.

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: P-113 PDS

Lab ID: 440-117992-16 PDS

Lab Name: TestAmerica Irvine

Job No.: 440-117992-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Lead	82.6		1500		49.3	NC	75-125		6020
Lead	83.3		29		50.0	109	75-125		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VB - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: P-124 MS | Lab ID: 440-117992-30 MS

Lab Name: TestAmerica Irvine | Job No.: 440-117992-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	5350		3800		49.5	* 3216	80-120	4	6020
Antimony	42.4		0.32	J	49.5	85	80-120		6020
Arsenic	50.9		1.9		49.5	99	80-120		6020
Barium	115		58		49.5	115	80-120		6020
Beryllium	45.6		ND		49.5	92	80-120		6020
Cadmium	48.0		0.25	J	49.5	96	80-120		6020
Chromium	54.8		7.5		49.5	96	80-120		6020
Cobalt	51.2		2.8		49.5	98	80-120		6020
Copper	87.0		33		49.5	108	80-120		6020
Lead	62.7		16		49.5	95	80-120		6020
Molybdenum	50.3		0.86	J	49.5	100	80-120		6020
Nickel	51.4		5.3		49.5	93	80-120		6020
Selenium	47.9		0.25	J	49.5	96	80-120		6020
Silver	23.4		ND		24.8	94	80-120		6020
Thallium	47.7		ND		49.5	96	80-120		6020
Vanadium	65.2		18		49.5	96	80-120		6020
Zinc	122		81		49.5	82	80-120		6020
Mercury	0.855		0.041		0.784	104	70-130		7471A

SSR = Spiked Sample Result

* FYI MS Recoveries > 125%, associated samples include P-120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-127D, P-118D and P-109D. Sample concentration >4X spike concentration.

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: P-124 MSD

Lab ID: 440-117992-30 MSD

Lab Name: TestAmerica Irvine

Job No.: 440-117992-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	5040		49.8	* 2563	80-120	6	20	4	6020
Antimony	47.5		49.8	95	80-120	11	20		6020
Arsenic	57.7		49.8	112	80-120	13	20		6020
Barium	126		49.8	138	80-120	10	20	F1	6020
Beryllium	51.0		49.8	103	80-120	11	20		6020
Cadmium	53.6		49.8	107	80-120	11	20		6020
Chromium	61.4		49.8	108	80-120	11	20		6020
Cobalt	55.8		49.8	107	80-120	9	20		6020
Copper	104		49.8	** 142	80-120	18	20	F1	6020
Lead	91.4		49.8	** 152	80-120	37	20	F1 F2	6020
Molybdenum	55.4		49.8	110	80-120	10	20		6020
Nickel	57.8		49.8	105	80-120	12	20		6020
Selenium	47.2		49.8	94	80-120	1	20		6020
Silver	25.8		24.9	104	80-120	10	20		6020
Thallium	53.6		49.8	108	80-120	12	20		6020
Vanadium	72.8		49.8	111	80-120	11	20		6020
Zinc	120		49.8	*** 78	80-120	1	20	F1	6020
Mercury	0.885		0.784	108	70-130	3	20		7471A

SDR = Sample Duplicate Result

* FYI MS Recoveries > 125%, associated samples include P-120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-127D, P-118D and P-109D. Sample concentration >4X spike concentration.

**MSD Recovery >125%, associated samples include -120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-127D, P-118D and P-109D. (J)

**MSD Recovery outside of the laboratory control limits but within 75-125%, associated samples include -120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-127D, P-118D and P-109D.

Calculations are performed before rounding to avoid round-off errors in calculated results.

9/17/2015

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 440-117992-A-25-A SD

SDG No:

Lab Name: TestAmerica Irvine Job No: 440-117992-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	4100		4680		13	V	6020
Antimony	ND		ND		NC		6020
Antimony	0.46	J	ND		NC		6020
Arsenic	1.3		1.39	J	NC		6020
Arsenic	ND		ND		NC		6020
Barium	61		67.0		NC		6020
Barium	62		60.9		1.3		6020
Beryllium	ND		ND		NC		6020
Cadmium	ND		ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	7.9		7.85		NC		6020
Chromium	7.0	J	ND		NC		6020
Cobalt	2.8	J	ND		NC		6020
Cobalt	2.6		2.82		NC		6020
Copper	26		27.8		6.2		6020
Copper	26		ND		NC		6020
Lead	15		16.4	J	NC		6020
Lead	14		14.7		2.7		6020
Molybdenum	ND		ND		NC		6020
Molybdenum	0.74	J	ND		NC		6020
Nickel	5.5		5.57		NC		6020
Nickel	5.2	J	ND		NC		6020
Selenium	ND		ND		NC		6020
Selenium	ND		ND		NC		6020
Silver	0.11	J	ND		NC		6020
Silver	ND		ND		NC		6020
Thallium	ND		ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	17		ND		NC		6020
Vanadium	16		16.9		NC		6020
Zinc	84		88.7		NC		6020
Zinc	90	J	ND		NC		6020

* FYI Interference check standard >10% but <15%, associated samples include P-120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-127D, P-118D, P-109D.

Calculations are performed before rounding to avoid round-off errors in calculated results. AKG 9/17/2015

FORM VIII-IN

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: P-113 | Lab Sample ID: 440-117992-16

Lab Name: TestAmerica Irvine | Job No.: 440-117992-1

SDG ID.:

Matrix: Solid | Date Sampled: 08/11/2015 14:40

Reporting Basis: WET | Date Received: 08/12/2015 17:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	2000	49	25	mg/Kg			200	6020
7440-36-0	Antimony	0.64	0.99	0.27	mg/Kg	J		20	6020
7440-38-2	Arsenic	ND	0.49	0.25	mg/Kg			20	6020
7440-39-3	Barium	43	0.49	0.25	mg/Kg			20	6020
7439-92-1	Lead Prep Batch 440-276563	29	0.50	0.25	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.30	0.15	mg/Kg			20	6020
7440-43-9	Cadmium	0.33	0.49	0.25	mg/Kg	J		20	6020
7440-47-3	Chromium	9.5	0.99	0.49	mg/Kg			20	6020
7440-48-4	Cobalt	2.7	0.49	0.21	mg/Kg			20	6020
7440-50-8	Copper	730	0.99	0.49	mg/Kg			20	6020
7439-92-1	Lead Prep Batch 440-273419	9300	4.9	2.5	mg/Kg		D	200	6020
7439-92-1	Lead Prep Batch 440-273419	11000	0.49	0.25	mg/Kg		E	20	6020
7439-92-1	Lead Prep Batch 440-278738	25	0.49	0.25	mg/Kg			20	6020
7439-92-1	Lead Prep Batch 440-278738	1500	0.49	0.25	mg/Kg			20	6020
7439-98-7	Molybdenum	ND	0.99	0.49	mg/Kg			20	6020
7440-02-0	Nickel	9.9	0.99	0.49	mg/Kg			20	6020
7782-49-2	Selenium	ND	0.99	0.20	mg/Kg			20	6020
7440-22-4	Silver	1.4	0.49	0.099	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.49	0.25	mg/Kg			20	6020
7440-62-2	Vanadium	5.1	0.99	0.49	mg/Kg			20	6020
7440-66-6	Zinc	130	9.9	4.9	mg/Kg			20	6020
7439-97-6	Mercury	0.11	0.020	0.012	mg/Kg			1	7471A

Sample prepped/digested on three separate batches, four separate digestates. Based on the variation of sample results, non sample homegeneity is suspected.

AKG
9/17/2015

CONVENTIONALS DATA VALIDATION SUMMARY

Site Name: Exide Vernon
Project Number: 2013-2993-20
Sampling Date(s): 8/11/2015

Laboratory: Test America - Irvine
Case/Order No.: 440-117992

Compound List: % Moisture, Sulfate, TOC

Method: ASTM D-2216, 300.0, Lloyd Kahn

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

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			
Calibration Curve	X			
Initial Calibrations	X			
Continuing Calibrations	X			
Blank Analysis	X			
Field Duplicate Analysis			X	P-127 & P-127D, P-127W & P-127D-W, P-118 & P-118D, P-118W & P-118D-W, P-109 & P-
Matrix Spike Analysis (MS/MSD)			X	MS/MSD Recoveries
Laboratory Control Sample Analysis (LCS)	X			
Laboratory Duplicate Analysis			X	%RPD
Overall Assessment of Data	X			
Other:				

General Comments: Cooler Temp: 4.8°C, 5.2°C, 5.3°C, 5.5°C & 6.0°C

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

QA Scientist Amy Graham

Date 9/14/15

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-100**

Lab Sample ID: 440-117992-1

Client Matrix: Solid

Date Sampled: 08/11/2015 1600

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274660	Instrument ID:	IC-8
	N/A	Prep Batch:	N/A	Lab File ID:	440-0061880-013.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1508			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		69	J	4.0	4.9

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-101**

Lab Sample ID: 440-117992-2

Client Matrix: Solid

Date Sampled: 08/11/2015 1550

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274660	Instrument ID:	IC-8
	N/A	Prep Batch:	N/A	Lab File ID:	440-0061880-014.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1525			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		210 J		4.0	5.0

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-102**

Lab Sample ID: 440-117992-3

Client Matrix: Solid

Date Sampled: 08/11/2015 1555

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274660	Instrument ID:	IC-8
	N/A	Prep Batch:	N/A	Lab File ID:	440-0061880-015.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1541			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		33	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-102-W**

Lab Sample ID: 440-117992-4

Client Matrix: Water

Date Sampled: 08/11/2015 1555

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814053.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0423			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	83 J		13	25

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-103**

Lab Sample ID: 440-117992-5

Client Matrix: Solid

Date Sampled: 08/11/2015 1525

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820034.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2003			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		61	J	4.1	5.1

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-104**

Lab Sample ID: 440-117992-6

Client Matrix: Solid

Date Sampled: 08/11/2015 1545

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820035.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2018			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		170	J	4.0	5.0

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-105**

Lab Sample ID: 440-117992-7

Client Matrix: Solid

Date Sampled: 08/11/2015 1530

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820036.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2034			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		31 J	~~F1~~	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-106**

Lab Sample ID: 440-117992-8

Client Matrix: Solid

Date Sampled: 08/11/2015 1520

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820039.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2120			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		160	J	4.0	5.0

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-107**

Lab Sample ID: 440-117992-9

Client Matrix: Solid

Date Sampled: 08/11/2015 1535

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820085.d
Dilution:	2.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/21/2015 0919			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		190	J	8.0	10

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-108**

Lab Sample ID: 440-117992-10

Client Matrix: Solid

Date Sampled: 08/11/2015 1515

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820086.d
Dilution:	5.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/21/2015 0934			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		460	J	20	25

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-109**

Lab Sample ID: 440-117992-11

Client Matrix: Solid

Date Sampled: 08/11/2015 1500

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820044.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2244			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		190	J	4.0	4.9

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-110**

Lab Sample ID: 440-117992-12

Client Matrix: Solid

Date Sampled: 08/11/2015 1540

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820045.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2259			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		30	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-111**

Lab Sample ID: 440-117992-13

Client Matrix: Solid

Date Sampled: 08/11/2015 1510

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820046.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2314			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		74	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-112**

Lab Sample ID: 440-117992-14

Client Matrix: Solid

Date Sampled: 08/11/2015 1400

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820047.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2330			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		23	J	4.0	5.0

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-112-W**

Lab Sample ID: 440-117992-15

Client Matrix: Water

Date Sampled: 08/11/2015 1400

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814054.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0439			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	140 J		13	25

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-113**

Lab Sample ID: 440-117992-16

Client Matrix: Solid

Date Sampled: 08/11/2015 1440

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820048.d
Dilution:	1.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 2345			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		26	J	3.9	4.9

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-114**

Lab Sample ID: 440-117992-17

Client Matrix: Solid

Date Sampled: 08/11/2015 1435

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820087.d
Dilution:	2.0	Leach Batch:	440-274585	Initial Weight/Volume:	5 mL
Analysis Date:	08/21/2015 0949			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0032				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		210	J	8.0	10

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-115**

Lab Sample ID: 440-117992-18

Client Matrix: Solid

Date Sampled: 08/11/2015 1445

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820008.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1304			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		190	J	4.0	4.9

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-116**

Lab Sample ID: 440-117992-19

Client Matrix: Solid

Date Sampled: 08/11/2015 1430

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820054.d
Dilution:	20	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/21/2015 0123			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		1700	J	81	100

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-117**

Lab Sample ID: 440-117992-20

Client Matrix: Solid

Date Sampled: 08/11/2015 1350

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820010.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1334			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		76 J	~~F1~~	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118**

Lab Sample ID: 440-117992-21

Client Matrix: Solid

Date Sampled: 08/11/2015 1420

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820013.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1420			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		64	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118-W**

Lab Sample ID: 440-117992-22

Client Matrix: Water

Date Sampled: 08/11/2015 1420

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814055.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0454			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	140 J		13	25

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-119**

Lab Sample ID: 440-117992-23

Client Matrix: Solid

Date Sampled: 08/11/2015 1355

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820014.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1436			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		67	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-119-W**

Lab Sample ID: 440-117992-24

Client Matrix: Water

Date Sampled: 08/11/2015 1355

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814056.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0509			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	65 J		13	25

AKG
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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-120**

Lab Sample ID: 440-117992-25

Client Matrix: Solid

Date Sampled: 08/11/2015 1345

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820015.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1451			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		31	J	4.0	5.1

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-121**

Lab Sample ID: 440-117992-26

Client Matrix: Solid

Date Sampled: 08/11/2015 1340

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820018.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1552			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		22	J	4.0	5.0

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-122**

Lab Sample ID: 440-117992-27

Client Matrix: Solid

Date Sampled: 08/11/2015 1335

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820019.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1607			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		31	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-122-W**

Lab Sample ID: 440-117992-28

Client Matrix: Water

Date Sampled: 08/11/2015 1335

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814057.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0525			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	120	J	13	25

AKG
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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-123**

Lab Sample ID: 440-117992-29

Client Matrix: Solid

Date Sampled: 08/11/2015 1330

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820020.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1623			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		40	J	4.0	5.0

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-124**

Lab Sample ID: 440-117992-30

Client Matrix: Solid

Date Sampled: 08/11/2015 1315

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820021.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1638			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		51	J	4.0	5.0

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Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-125**

Lab Sample ID: 440-117992-31

Client Matrix: Solid

Date Sampled: 08/11/2015 1320

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820055.d
Dilution:	10	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/21/2015 0138			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		1200	J	40	50

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-126**

Lab Sample ID: 440-117992-32

Client Matrix: Solid

Date Sampled: 08/11/2015 1251

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820025.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1739			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		130	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-126-W**

Lab Sample ID: 440-117992-33

Client Matrix: Water

Date Sampled: 08/11/2015 1251

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814058.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0540			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	53	J	13	25

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127**

Lab Sample ID: 440-117992-34

Client Matrix: Solid

Date Sampled: 08/11/2015 1224

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820026.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1755			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		170	J	4.0	5.0

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127-W**

Lab Sample ID: 440-117992-35

Client Matrix: Water

Date Sampled: 08/11/2015 1224

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814059.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0556			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	47 J		13	25

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-128**

Lab Sample ID: 440-117992-36

Client Matrix: Solid

Date Sampled: 08/11/2015 1310

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820027.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1810			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		83	J	4.1	5.1

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-129**

Lab Sample ID: 440-117992-37

Client Matrix: Solid

Date Sampled: 08/11/2015 1325

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820056.d
Dilution:	20	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/21/2015 0153			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		1300	J	79	98

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127D**

Lab Sample ID: 440-117992-38

Client Matrix: Solid

Date Sampled: 08/11/2015 1230

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820031.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1917			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		140	J	4.0	4.9

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-127D-W**

Lab Sample ID: 440-117992-39

Client Matrix: Water

Date Sampled: 08/11/2015 1230

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814060.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0611			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	110 J		13	25

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118D**

Lab Sample ID: 440-117992-40

Client Matrix: Solid

Date Sampled: 08/11/2015 1425

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820032.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1932			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		78	J	4.0	5.0

AKG 9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-118D-W**

Lab Sample ID: 440-117992-41

Client Matrix: Water

Date Sampled: 08/11/2015 1425

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Dissolved

Analysis Method:	300.0	Analysis Batch:	440-273258	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150814061.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	08/15/2015 0626			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Sulfate	210 J		13	25

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

Client Sample ID: **P-109D**

Lab Sample ID: 440-117992-42

Client Matrix: Solid

Date Sampled: 08/11/2015 1505

Date Received: 08/12/2015 1700

300.0 Anions, Ion Chromatography-Soluble

Analysis Method:	300.0	Analysis Batch:	440-274664	Instrument ID:	IC-11
	N/A	Prep Batch:	N/A	Lab File ID:	20150820033.d
Dilution:	1.0	Leach Batch:	440-274587	Initial Weight/Volume:	5 mL
Analysis Date:	08/20/2015 1947			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1 uL
Leach Date:	08/20/2015 0056				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Sulfate		180	J	4.0	5.0

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-100**

Lab Sample ID: 440-117992-1

Client Matrix: Solid

Date Sampled: 08/11/2015 1600

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.68		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	13000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1812						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-101**

Lab Sample ID: 440-117992-2

Client Matrix: Solid

Date Sampled: 08/11/2015 1550

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	40		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	36000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1819						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-102**

Lab Sample ID: 440-117992-3

Client Matrix: Solid

Date Sampled: 08/11/2015 1555

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	36		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	27000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1826						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-103**

Lab Sample ID: 440-117992-5

Client Matrix: Solid

Date Sampled: 08/11/2015 1525

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	21		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	33000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1833						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-104**

Lab Sample ID: 440-117992-6

Client Matrix: Solid

Date Sampled: 08/11/2015 1545

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.19		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	19000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1840						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-105**

Lab Sample ID: 440-117992-7

Client Matrix: Solid

Date Sampled: 08/11/2015 1530

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	31		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	4100		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1524						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-106**

Lab Sample ID: 440-117992-8

Client Matrix: Solid

Date Sampled: 08/11/2015 1520

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	2.6		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	3900	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1907						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-107**

Lab Sample ID: 440-117992-9

Client Matrix: Solid

Date Sampled: 08/11/2015 1535

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.90		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	5100	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1914						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-108**

Lab Sample ID: 440-117992-10

Client Matrix: Solid

Date Sampled: 08/11/2015 1515

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.8		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	87000		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1544						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-109**

Lab Sample ID: 440-117992-11

Client Matrix: Solid

Date Sampled: 08/11/2015 1500

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	2.2		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	150000		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1550						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-110**

Lab Sample ID: 440-117992-12

Client Matrix: Solid

Date Sampled: 08/11/2015 1540

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.058		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	9700	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1935						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-111**

Lab Sample ID: 440-117992-13

Client Matrix: Solid

Date Sampled: 08/11/2015 1510

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	48		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	63000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 1943						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-112**

Lab Sample ID: 440-117992-14

Client Matrix: Solid

Date Sampled: 08/11/2015 1400

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	7.5		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	6700	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2003						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-113**

Lab Sample ID: 440-117992-16

Client Matrix: Solid

Date Sampled: 08/11/2015 1440

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	10		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	19000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2009						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-114**

Lab Sample ID: 440-117992-17

Client Matrix: Solid

Date Sampled: 08/11/2015 1435

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.93		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	100000		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1556						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-115**

Lab Sample ID: 440-117992-18

Client Matrix: Solid

Date Sampled: 08/11/2015 1445

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.24		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	2700	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2023						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-116**

Lab Sample ID: 440-117992-19

Client Matrix: Solid

Date Sampled: 08/11/2015 1430

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	3.4		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	45000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2030						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-117**

Lab Sample ID: 440-117992-20

Client Matrix: Solid

Date Sampled: 08/11/2015 1350

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	26		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	9500	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2036						DryWt Corrected: N

AKG
9/14/2015

General Chemistry

Client Sample ID: **P-118**

Lab Sample ID: 440-117992-21 Date Sampled: 08/11/2015 1420
Client Matrix: Solid Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	9.5		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	9100	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2043						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-119**

Lab Sample ID: 440-117992-23

Client Matrix: Solid

Date Sampled: 08/11/2015 1355

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	12		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273391	Analysis Date: 08/14/2015 2142						DryWt Corrected: N
Total Organic Carbon	21000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2050						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-120**

Lab Sample ID: 440-117992-25

Client Matrix: Solid

Date Sampled: 08/11/2015 1345

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	33		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	10000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2056						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-121**

Lab Sample ID: 440-117992-26

Client Matrix: Solid

Date Sampled: 08/11/2015 1340

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	8.2		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	7400	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2103						DryWt Corrected: N

AKG
9/14/2015

General Chemistry

Client Sample ID: P-122

Lab Sample ID: 440-117992-27 Date Sampled: 08/11/2015 1335
Client Matrix: Solid Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	16		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	16000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2110						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-123**

Lab Sample ID: 440-117992-29

Client Matrix: Solid

Date Sampled: 08/11/2015 1330

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	10		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	1900	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2117						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-124**

Lab Sample ID: 440-117992-30

Client Matrix: Solid

Date Sampled: 08/11/2015 1315

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	16		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	2700	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2124						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-125**

Lab Sample ID: 440-117992-31

Client Matrix: Solid

Date Sampled: 08/11/2015 1320

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	37		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	50000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2144						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-126**

Lab Sample ID: 440-117992-32

Client Matrix: Solid

Date Sampled: 08/11/2015 1251

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	34		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	18000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2151						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-127**

Lab Sample ID: 440-117992-34

Client Matrix: Solid

Date Sampled: 08/11/2015 1224

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	9.7		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	4300	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2158						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-128**

Lab Sample ID: 440-117992-36

Client Matrix: Solid

Date Sampled: 08/11/2015 1310

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	29		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	23000	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93195	Analysis Date: 08/20/2015 2205						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-129**

Lab Sample ID: 440-117992-37

Client Matrix: Solid

Date Sampled: 08/11/2015 1325

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.3		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	60000		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1603						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-127D**

Lab Sample ID: 440-117992-38

Client Matrix: Solid

Date Sampled: 08/11/2015 1230

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	9.2		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2216						DryWt Corrected: N
Total Organic Carbon	3900		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1609						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-118D**

Lab Sample ID: 440-117992-40

Client Matrix: Solid

Date Sampled: 08/11/2015 1425

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	6.6		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2219						DryWt Corrected: N
Total Organic Carbon	4200	J	mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1616						DryWt Corrected: N

AKG
9/14/2015

Client: Advanced GeoServices Corporation

Job Number: 440-117992-1

General Chemistry

Client Sample ID: **P-109D**

Lab Sample ID: 440-117992-42

Client Matrix: Solid

Date Sampled: 08/11/2015 1505

Date Received: 08/12/2015 1700

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	2.1		%	0.10	0.10	1.0	D-2216
Analysis Batch: 440-273395	Analysis Date: 08/14/2015 2220						DryWt Corrected: N
Total Organic Carbon	160000		mg/Kg	390	1000	1.0	Lloyd Kahn
Analysis Batch: 200-93194	Analysis Date: 08/25/2015 1622						DryWt Corrected: N

AKG
9/14/2015

HOLDING TIMES
WC

Site Name: **Exide Vernon** **Wet Chemistry**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Date Analyzed	Analysis Hold Time (days)	Days to Analysis	Qualify
440-117992-01	P-100	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-02	P-101	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-03	P-102	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-05	P-103	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-06	P-104	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-07	P-105	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-08	P-106	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-09	P-107	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-10	P-108	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-11	P-109	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-42	P-109D	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-12	P-110	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-13	P-111	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-14	P-112	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-16	P-113	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-17	P-114	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-18	P-115	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-19	P-116	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-20	P-117	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-21	P-118	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-40	P-118D	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-23	P-119	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-25	P-120	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-26	P-121	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-27	P-122	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-29	P-123	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-30	P-124	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-31	P-125	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-32	P-126	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-34	P-127	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-38	P-127D	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-36	P-128	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-37	P-129	Sediment	Percent Moisture	8/11/2015	8/14/2015	10	3	
440-117992-01	P-100	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-02	P-101	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-03	P-102	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-05	P-103	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-06	P-104	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-07	P-105	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-08	P-106	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-09	P-107	Sediment	Sulfate	8/11/2015	8/21/2015	28	10	
440-117992-10	P-108	Sediment	Sulfate	8/11/2015	8/21/2015	28	10	
440-117992-11	P-109	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-42	P-109D	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-12	P-110	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	

9/14/2015

HOLDING TIMES
WC

Site Name: **Exide Vernon** **Wet Chemistry**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Date Analyzed	Analysis Hold Time (days)	Days to Analysis	Qualify
440-117992-13	P-111	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-14	P-112	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-16	P-113	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-17	P-114	Sediment	Sulfate	8/11/2015	8/21/2015	28	10	
440-117992-18	P-115	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-19	P-116	Sediment	Sulfate	8/11/2015	8/21/2015	28	10	
440-117992-20	P-117	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-21	P-118	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-40	P-118D	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-23	P-119	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-25	P-120	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-26	P-121	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-27	P-122	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-29	P-123	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-30	P-124	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-31	P-125	Sediment	Sulfate	8/11/2015	8/21/2015	28	10	
440-117992-32	P-126	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-34	P-127	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-38	P-127D	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-36	P-128	Sediment	Sulfate	8/11/2015	8/20/2015	28	9	
440-117992-37	P-129	Sediment	Sulfate	8/11/2015	8/21/2015	28	10	
440-117992-04	P-102W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-15	P-112W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-22	P-118W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-41	P-118D-W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-24	P-119W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-28	P-122W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-33	P-126W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-35	P-127W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-39	P-127D-W	Pore Water	Sulfate, Dissolved	8/11/2015	8/15/2015	28	4	
440-117992-01	P-100	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-02	P-101	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-03	P-102	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-05	P-103	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-06	P-104	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-07	P-105	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-08	P-106	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-09	P-107	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-10	P-108	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-11	P-109	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-42	P-109D	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-12	P-110	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-13	P-111	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-14	P-112	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-16	P-113	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	

9/14/2015

HOLDING TIMES
WC

Site Name: **Exide Vernon** **Wet Chemistry**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Date Analyzed	Analysis Hold Time (days)	Days to Analysis	Qualify
440-117992-17	P-114	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-18	P-115	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-19	P-116	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-20	P-117	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-21	P-118	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-40	P-118D	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-23	P-119	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-25	P-120	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-26	P-121	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-27	P-122	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-29	P-123	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-30	P-124	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-31	P-125	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-32	P-126	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-34	P-127	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-38	P-127D	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	
440-117992-36	P-128	Sediment	Total Organic Carbon	8/11/2015	8/20/2015	28	9	
440-117992-37	P-129	Sediment	Total Organic Carbon	8/11/2015	8/25/2015	28	14	

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440-117992_Field Duplicate.xls
WC

Site Name:	**EXIDE VERNON**	**Laboratory:**	**TA Irvine**
Project Number:	**2013-2993**	**Matrix:**	**Sediment**

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Percent Moisture	%	2.2		0.1		
P-109D	Percent Moisture	%	2.1		0.1	4.65	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Sulfate	mg/Kg	190		4.9		
P-109D	Sulfate	mg/Kg	180		5	5.41	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-109	Total Organic Carbon	mg/Kg	150000		1000		
P-109D	Total Organic Carbon	mg/Kg	160000		1000	6.45	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Percent Moisture	%	9.5		0.1		
P-118D	Percent Moisture	%	6.6		0.1	36.02	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Sulfate	mg/Kg	64		5		
P-118D	Sulfate	mg/Kg	78		5	19.72	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118	Total Organic Carbon	mg/Kg	9100		1000		
P-118D	Total Organic Carbon	mg/Kg	4200		1000	73.68	yes
Sample ID	**Analyte**	**Units**	**Result**	**Q**	**RL**	**RPD**	**Qualify**
P-127	Percent Moisture	%	9.7		0.1		
P-127D	Percent Moisture	%	9.2		0.1	5.29	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-127	Sulfate	mg/Kg	170		5		
P-127D	Sulfate	mg/Kg	140		4.9	19.35	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127	Total Organic Carbon	mg/Kg	4300		1000		
P-127D	Total Organic Carbon	mg/Kg	3900		1000	400.00	no

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440-117992_Field Duplicate.xls
WC

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify
P-118D-W	Sulfate, Dissolved	mg/L	210		25		
P-118W	Sulfate, Dissolved	mg/L	140		25	40.00	yes

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
P-127D-W	Sulfate, Dissolved	mg/L	110		25		
P-127W	Sulfate, Dissolved	mg/L	47		25	63.00	yes

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

*** - Denotes %RPD or difference outside criteria.**

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

9/14/2015

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Matrix: Solid (Soluble) Level: Low Lab File ID: 20150820037.d

Lab ID: 440-117992-7 MS Client ID: P-105 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Sulfate	48.9	31	69.8	79	80-120	F1

* MS recovery outside of the laboratory control limits, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113 and P-114 (UJ/J)

Column to be used to flag recovery and RPD values

AKG 9/14/2015

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Matrix: Solid (Soluble) Level: Low Lab File ID: 20150820038.d

Lab ID: 440-117992-7 MSD Client ID: P-105 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Sulfate	49.5	64.3	67	8	20	80-120	F1

* MSD recovery outside of the laboratory control limits, associated samples include P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113 and P-114 (UJ/J)

Column to be used to flag recovery and RPD values

AKG 9/14/2015

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Matrix: Water (Dissolved Level: Low Lab File ID: 20150814062.d

Lab ID: 440-117992-41 MS Client ID: P-118D-W MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Sulfate	50.0	210	236	61	80-120	4

* MS recovery outside of the laboratory control limits, associated samples include P-102-W, P-112-W, P-118-W, P-119-W, P-122-W, P-126-W, P-127-W, P-127D-W, P-118-D-W (UJ/J)

Column to be used to flag recovery and RPD values

AKG 9/14/2015

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Matrix: Water (Dissolved Level: Low Lab File ID: 20150814065.d

Lab ID: 440-117992-41 MSD Client ID: P-118D-W MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Sulfate	50.0	232	54	2	20	80-120	4

* MSD recovery outside of the laboratory control limits, associated samples include P-102-W, P-112-W, P-118-W, P-119-W, P-122-W, P-126-W, P-127-W, P-127D-W, P-118-D-W (UJ/J)

Column to be used to flag recovery and RPD values

AKG 9/14/2015

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-117992-1

SDG No.:

Matrix: Solid (Soluble) Level: Low Lab File ID: 20150820012.d

Lab ID: 440-117992-20 MSD Client ID: P-117 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Sulfate	50.0	139	125	4	20	80-120	F1

* MSD Recovery outside of the laboratory control limits, associated samples include P-115, P-116, P-117, P-118, P-119, P-120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-127D, P-118D, P-109D (J)

Column to be used to flag recovery and RPD values

AKG 9/14/2015

FORM III 300.0

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington Job No.: 440-117992-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 93195	Date: 08/20/2015 21:30							
Lloyd Kahn	P-124	440-117992-30	Total Organic Carbon	2700	mg/Kg			
Lloyd Kahn	P-124	440-117992-30 DU	Total Organic Carbon	3720	mg/Kg	* 31	20	F3
Batch ID: 93194	Date: 08/25/2015 15:31							
Lloyd Kahn	P-105	440-117992-7	Total Organic Carbon	4100	mg/Kg			
Lloyd Kahn	P-105	440-117992-7 DU	Total Organic Carbon	3600	mg/Kg	13	20	

* %RPD >20%, associated samples include P-100, P-101, P-102, P-103, P-104, P-106, P-107, P-110, P-111, P-112, P-113, P-115, P-116, P-117, P-118, P-119, P-120, P-121, P-122, P-123, P-124, P-125, P-126, P-127 and P-128 (UJ/J)

Calculations are performed before rounding to avoid round-off errors in calculated results. AKG 9/14/2015

FORM VI-IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

November 6, 2015

Adam Doubleday
Advanced GeoServices Corporation
1055 Andrew Drive, Suite A
West Chester, PA 19380

Subject: Lead Homogeneity for Vernon NRDD Sample P-113 (lab ID 440-117992-16)

Mr. Doubleday:

Sample P-113 (collected 08/11/15, lab ID 440-117992-16) was originally analyzed 08/16/15 with results for lead around 10,000 mg/kg. It was re-digested and analyzed 09/01/15 with a result of only 29 mg/kg. Because of these disparate results, the sample was digested a third time and analyzed 09/09/15. Unfortunately, the sample in this third prep batch was sieved prior to digestion due to laboratory miscommunication. The sample was digested a fourth time, in quadruplicate, and analyzed on 09/18/15 with results ranging from 32 mg/kg to 3200 mg/kg. The sample is gravel with various sizes of rocks in it. The laboratory results obtained attest to its heterogeneity.

The table below summarizes all results and associated matrix QC for 117992-16.

Analysis Date	Sample ID	Sample Type	Prep Batch	Analysis Batch	Dilution	Pb result mg/kg	Comments
8/16/2015	440-117992-16	Client	273419-18	273869-40	20	**11000**	Original; over-range
8/17/2015	440-117992-16	Client	273419-18	273866-36	20	**9300**	Confirmation
8/17/2015	440-117992-16	Client	273419-18	273987-38	20	**9500**	
9/1/2015	440-117992-16	Client	276563-3	277670-19	20	**29**	
9/1/2015	440-117992-16 MS	QC	276563-4	277670-20	20	78	%R=100
9/1/2015	440-117992-16 MSD	QC	276563-5	277670-21	20	77	%R=95
9/1/2015	440-117992-16 PDS	QC	276563-3	277670-22	20	83	%R=110
9/09/2015	440-117992-16	Client	278738-3	278998-21	20	25	Sieved
9/09/2015	440-117992-16 MS	QC	278738-4	278998-22	20	1120	%R=-800%; sieved
9/09/2015	440-117992-16 MSD	QC	278738-5	278998-23	20	1160	%R=-700%; sieved
9/09/2015	440-117992-16 PDS	QC	278738-3	278998-24	20	86	%R=-2800%;sieved
9/09/2015	440-117992-16	Client	278738-6	278998-25	20	1500	Sieved
9/09/2015	440-117992-16 SD	QC	278738-6	278998-26	100	1630	%Diff=9; sieved
9/18/2015	440-117992-16	Client	280969-3	281354-16	20	**80**	
9/18/2015	440-117992-16 MS	QC	280969-4	281354-17	20	520	%R=70%

Analysis Date	Sample ID	Sample Type	Prep Batch	Analysis Batch	Dilution	Pb result mg/kg	Comments
9/18/2015	440-117992-16 MSD	QC	280969-5	281354-18	20	110	%R=-800
9/18/2015	440-117992-16 PDS	QC	280969-3	281354-19	2	130	%R=97%
9/18/2015	440-117992-16	Client	280969-6	281354-20	20	**410**	
9/18/2015	440-117992-16 SD	QC	280969-6	281354-21	100	81	%Diff=-80
9/18/2015	440-117992-16	Client	280969-7	281354-22	20	**32**	
9/18/2015	440-117992-16	Client	280969-8	281354-23	20	**3200**	Over-range
9/18/2015	440-117992-16	Client	280969-9	281354-26	20	**490**	

All samples were prepared using 2±0.04g of sample and a final digestate volume of 50 mL.

The laboratory will withdraw the results reported from the 09/09/15 run as they were processed incorrectly. The laboratory will report the other nine acceptable results for this sample as these results (and the erratic QC recoveries) attest to the lack of homogeneity.

If you have any questions or require further information, please contact me or your project manager at (949) 261-1022.

Sincerely yours,

TestAmerica Irvine

David C. Dawes
Quality Assurance Officer

APPENDIX B

LOG OF TEST BORING

TEST BORING P-100

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, micaceous silty sand, 10% coarse sands, 50% medium sands, 20% fine sands, 20% silt. 0 / 0.083 / -0.083	10 YR 4/2		
		Completion Depth = 0.083 feet REFUSAL @ 1.0 INCHES BOTTOM OF CHANNEL			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-101

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark brown, moist, micaceous sandy silt, 80% silt, 20% fine sand.	0 0.5 -0.5	10 YR 2/2		
		Completion Depth = 0.5 feet REFUSAL @ 0.5 FT. BOTTOM OF CHANNEL				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-102

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark brown, saturated sandy silt, 90% silt, 10% fine sand. (0 – 0.33)	10 YR 2/2		
		Completion Depth = 0.33 feet REFUSAL @ 4 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-103

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark grayish brown, moist, silty sand, poorly graded, 60% medium sands, 20% fine sands, 20% silt. (0 – 0.21)	10 YR 3/2		
		Completion Depth = 0.21 feet REFUSAL @ 2.5 INCHES. BOTTOM OF CHANNEL.			

0 0.21 -0.21

2.5 5 7.5 10 12.5 15 17.5

LOG OF TEST BORING

TEST BORING P-104

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, poorly graded sands, 10% fine gravel, 20% coarse sands, 40% medium sands, 30% fine sands. 0 / 0.125 / -0.125	10 YR 4/2		
		Completion Depth = 0.125 feet REFUSAL @ 1.5 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-105

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Black, moist, micaceous silty sand, 70% fine sands, 30% silt.	0 0.42 -0.42	10 YR 2/1		
		Completion Depth = 0.42 feet REFUSAL @ 5 INCHES. BOTTOM OF CHANNEL.				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-106

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Brown, moist, micaceous, poorly graded sand, 70% medium sand, 20% fine sand, 10% silt. 0 / 0.33 / -0.33	10 YR 4/3		
		Completion Depth = 0.33 feet REFUSAL @ 4.0 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-107

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Light brownish gray, dry, micaceous, poorly graded sands, 70% medium sands, 30% fine sands. (0 – 0.21)	10 YR 6/2		
		Completion Depth = 0.21 feet REFUSAL @ 2.5 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-108

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, fine sandy silt, 20% fine sands, 80% silt, micaceous.	0 0.42 -0.42	10 YR 4/2		
		Completion Depth = 0.42 feet REFUSAL @ 5 INCHES. BOTTOM OF CHANNEL.				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-109

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, micaceous, 80% silt, 20% fine sands. 0 / .08 / -0.08	10 YR 4/2		
		Completion Depth = 0.08 feet REFUSAL @ 1 INCH. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-110

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, poorly graded sands, 30% coarse sands, 40% medium sands, 30% fine sands. 0 / 0.17 / -0.17	10 YR 4/2		
		Completion Depth = 0.17 feet REFUSAL @ 2 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-111

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark brown, moist, fine sandy silt, 90% silt, 10% fine sands, trace organic roots. 0 / 0.25 / -0.25	10 YR 2/2		
		Completion Depth = 0.25 feet REFUSAL @ 3 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-112

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark grayish brown, material is saturated, poorly graded sand, 30% coarse sand, 30% medium sands, 30% fine sands, 10% silt. 0 / .08 / -0.08	10 YR 3/2		
		Completion Depth = 0.08 feet REFUSAL @ 1 INCH. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-113

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark brown, poorly graded sand, wet, 10% fine gravel, 30% coarse sand, 30% medium sand, 30% fine sand.	0 0.25 -0.25	10 YR 2/2		
		Completion Depth = 0.25 feet REFUSAL @ 3 INCHES. BOTTOM OF CHANNEL.				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-114

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, micaceous sandy silt, 40% fine sand, 60% silt.	0 0.42 -0.42	10 YR 4/2		
		Completion Depth = 0.42 feet REFUSAL @ 5 INCHES. BOTTOM OF CHANNEL.				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-115

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Brown, dry, loose silty sand, micaceous, 10% medium sands, 70% fine sands, 20% silt.	0 0.33 -0.33	10 YR 4/3		
		Completion Depth = 0.33 feet REFUSAL @ 4 INCHES. BOTTOM OF CHANNEL.				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-116

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, dry, loose silty fine sand, 60% fine sands, 40% silt. 0 / 0.17 / -0.17	10 YR 4/2		
		Completion Depth = 0.17 feet REFUSAL @ 2 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-117

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark grayish brown, moist, silty sand, 40% silt, 60% fine sands, trace organic roots. 0 / .08 / -0.08	10 YR 3/2		
		Completion Depth = 0.08 feet REFUSAL @ 1 INCH. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-118

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark grayish brown, saturated poorly graded, 40% coarse sands, 40% medium sand, 20% fine sands. (0 – .17, -0.17)	10 YR 3/2		
		Completion Depth = 0.17 feet REFUSAL @ 2 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-119

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark grayish brown, saturated, poorly graded, fine gravel 20%, 20% coarse sands, 40% medium sands, 20% fine sands. (0 / 0.25 / -0.25)	10 YR 3/2		
		Completion Depth = 0.25 feet REFUSAL @ 3 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-120

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description		Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Black, wet, silty sand, 60% fine sands, 40% silt, trace organic roots.	0 0.42 -0.42	10 YR 2/1		
		Completion Depth = 0.42 feet REFUSAL @ 5 INCHES. BOTTOM OF CHANNEL.				
2.5						
5						
7.5						
10						
12.5						
15						
17.5						

LOG OF TEST BORING

TEST BORING P-121

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark grayish brown, poorly graded sands, wet, fine gravel 20%, coarse sands 40%, 20% medium sands, 20% fine sands. 0 / 0.33 / -0.33	10 YR 3/2		
		Completion Depth = 0.33 feet REFUSAL @ 4 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-122

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark gray, saturated, poorly graded sand, 80% coarse to medium sand, 20% fine sand. (0 – 0.42)	10 YR 3/1		
		Completion Depth = 0.42 feet REFUSAL @ 5 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-123

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark grayish brown, moist, poorly graded, coarse to fine sand, 70% coarse sand, medium sand 20%, fine sand 10%. (0 / 0.08 / -0.08)	10 YR 3/2		
		Completion Depth = 0.08 feet REFUSAL @ 1 INCH. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-124

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Dark grayish brown, loose, wet, poorly graded silty sand, medium sand 70%, 20% fine sand, 10% silt. 0 / 0.13 / -0.13	10 YR 4/2		
		Completion Depth = 0.13 feet REFUSAL @ 1.5 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-125

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Very dark brown, moist, sandy silt, 20% medium sand, 80% silt, micaceous. 0 / 0.33 / -0.33	10 YR 2/2		
		Completion Depth = 0.33 feet REFUSAL @ 4 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-126

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Black, loose, sandy silt, 80% silt, 20% fine sand. 0 / 0.08 / -0.08	10 YR 2/1		
		Completion Depth = 0.08 feet REFUSAL @ 1 INCH. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-127

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Very dark gray, poorly graded, loose, coarse to fine sand, coarse sand 70%, medium sand 20%, fine sand 10%, no staining, saturated. (0 – 0.17 / -0.17)	10 YR 3/1		
		Completion Depth = 0.17 feet REFUSAL @ 2 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-128

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests: CAM 17
0	S-1	Black, loose, wet, sandy silt, 40% fine sand, 60% silt. 0 / 0.25 / -0.25	10 YR 2/1		
		Completion Depth = 0.25 feet REFUSAL @ 3 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

LOG OF TEST BORING

TEST BORING P-129

DATE: 8/11/15
PROJECT: Exide Vernon LA River
BORING LOCATION: Vernon, CA
DRILLING METHOD: Plastic Scoop
DRILLING COMPANY:
WATER ENCOUNTERED AT:

PROJECT NO.: 2013-2993-20
SURFACE ELEVATION:
CHECKED BY: MJP
DRILLER:
INSPECTOR: JB/EE

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS BLOWS PER 6 INCHES	Soil Description	Munsell Soil Color	Moisture (%)	Other Tests CAM 17
0	S-1	Brown, dry, micaceous fine sandy silt, 90% silt, 10% fine sands. 0 / 0.04 / -0.04	10 YR 4/3		
		Completion Depth = 0.04 feet REFUSAL @ 0.5 INCHES. BOTTOM OF CHANNEL.			
2.5					
5					
7.5					
10					
12.5					
15					
17.5					

APPENDIX C

08.11.2015

APPENDIX D

LA River Results Lead Outlier Review

Calculation performed using http://graphpad.com/quickcalcs/Grubbs1.cfm

Descriptive Statistics

Mean: 396.420

SD: 1684.805

# of values: 30

Outlier detected? Yes

Significance level: 0.05 (two-sided)

Critical value of Z: 2.90847389012

Your data

Row	Value	Z	Significant Outlier?
1	41.0	0.211	
2	66.0	0.196	
3	54.0	0.203	
4	230.0	0.099	
5	26.0	0.220	
6	32.0	0.216	
7	370.0	0.016	
8	63.0	0.198	
9	99.0	0.177	
10	110.0	0.170	
11	64.0	0.197	
12	440.0	0.026	
13	23.0	0.222	
14	9300.0	5.285	Significant outlier. P < 0.05
15	97.0	0.178	
16	36.0	0.214	
17	56.0	0.202	
18	25.0	0.220	
19	4.3	0.233	
20	61.0	0.199	
21	14.0	0.227	
22	250.0	0.087	
23	88.0	0.183	
24	13.0	0.228	

25	16.0	0.226	
26	86.0	0.184	
Row	**Value**	**Z**	**Significant Outlier?**
27	130.0	0.158	
28	5.3	0.232	
29	28.0	0.219	
30	65.0	0.197	