APPENDIX E

SOIL STABILIZATION TREATABILITY STUDY REPORT

KEMRON
ENVIRONMENTAL SERVICES

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June 25, 2013

Joseph B. Gormley, Jr., P.E.
Golder Associates
200 Century Parkway, Suite C
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Dear: Mr. Gormley,

KEMRON Environmental Services, Inc. (KEMRON) is pleased to present Golder Associates, Inc. (Golder) with this report of the soil stabilization treatability study performed on materials sampled from the Trinity North Plant and South Plant Sites, located in Greenville, Pennsylvania. Testing was conducted in accordance with a scope of work provided to KEMRON by Golder on April 26, 2013. This treatability study was conducted to evaluate potential reagents and reagent addition rates capable of reducing the leachability of metals regulated under the Resource Conservation and Recovery Act (RCRA). The leachability was determined by using the Toxicity Characteristic Leaching Procedure (TCLP) from the site soil. This report provides the methodology and protocols used as well as the results of testing performed on the untreated and treated site materials. Abbreviated tables are provided in text for the convenience of the reader. Comprehensive tables are provided at the end of the report text. All attachments, included appendixes, should be reviewed prior to making decisions concerning pilot or full scale implementation.

Material Receipt Handling and Characterization

KEMRON received two coolers from the Trinity North Plant and South Plant Sites. Immediately following sample receipt, KEMRON logged the materials into a sample-tracking database and placed the materials in secure temperature storage maintained at 4°Celsius (°C). The first cooler from the Trinity North Plant contained 3-1 gallon bags labeled ST-N1 and 3-1 gallon bags labeled ST-N2. The second cooler from the Trinity South Plant contained 3-1 gallon bags labeled ST-S1, 3-1 gallon bags labeled ST-S2, and 3-1 gallon bags labeled ST-S3.

Prior to mixture development, the samples were individually homogenized. Homogenization was conducted on each individual material type by the placing the material from the original bags into a pre-cleaned plastic mixing pan. The samples were gently blended by hand using a stainless steel spoon until visually homogenous. Any large pieces or agglomerated material were broken down into representative particle sizes or removed. Aggregates or particles greater than 0.5 inches were screened from the material and not used in the study. Five different site materials were received; all containers (bags of soil) from the same site location were combined together during homogenization. For example, three 1-gallon bags of site materials ST-N1 were emptied into the mixing pan and blended until visually homogenized. The homogenized materials were placed into new 1-gallon bags for storage.

After homogenization, KEMRON performed the following physical properties testing on each of the untreated materials:

PARAMETER	METHOD
Moisture Content	ASTM D2216
Material pH	EPA 9045

A summary of the data for this testing is presented in Table 1 of Appendix. Physical property data sheets are included **Appendix A.**

TABLE 1

North Plant Untreated Physical Properties Testing

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE ID	
			ST-N1	ST-N2
Moisture Content	ASTM D2216			
ASTM Moisture Content		%	13.74	17.42
Percent Solids		%	87.92	85.16
pH	EPA 9045	s.u.	6.27	6.61

TABLE 1

South Plant Untreated Physical Properties Testing

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE ID		
			ST-S1	ST-S2	ST-S3
Moisture Content	ASTM D2216				
ASTM Moisture Content		%	21.27	19.01	12.55
Percent Solids		%	82.47	84.03	88.85
pH	EPA 9045	s.u.	6.33	6.39	9.23

Notes
% = Percent
s.u. - Standard Units

Based on a review of the untreated physical properties results, the north pant soils are similar

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with approximately 85% to 87% solids and a pH of 6. The south plant soils are similar to each other with the exception of a significant difference in pH in sample ST-S3. The south plant soil samples ST-S1 and ST-S2 have a solids content of approximately 82-84% and a pH of 6. The solids content of ST-S3 is 88% with a pH of 9.2.

KEMRON manually selected representative, triplicate subsamples from the homogenized mass in a random pattern from the mixing pan. In addition, KEMRON visually confirmed the representative nature of the subsamples. The untreated analytical samples were collected immediately following final homogenization using the certified pre-cleaned 4-ounce glass sample jars. KEMRON submitted the samples to the laboratory for analysis of Total RCRA Metals and TCLP RCRA Metals by EPA Method 6010/7470. The TCLP preparation method used was EPA Method 1311. Gulf Coast Analytical Laboratories, Inc. (GCAL) in Baton Rouge, LA performed the Chemical analysis for this study. The results of the testing are summarized below. A comprehensive table of results is included as **Table 2** at the end of the text. The bolded results indicate that the concentrations were detected above the method detection limits (MDL). The analytical reports are included in **Appendix C.**

TABLE 2A
North Plant Untreated Analytical Testing
Total and TCLP Metals Analyses

Analysis Name	Units	ST-N1			ST-N2		
		A	B	C	A	B	C
		Result	Result	Result	Result	Result	Result
ASTM Moisture Content	%	**13.74**			**17.42**		
Soil pH	s.u.	**6.27**			**6.61**		
TCLP Extract pH	s.u.	6.11	5.13	5.44	5.69	6.39	6.25
Total Metals							
Arsenic	mg/kg	**27.2**	**24.2**	**26.0**	**22.9**	**21.3**	**25.9**
Barium	mg/kg	**55.8**	**70.3**	**62.6**	**221**	**181**	**221**
Cadmium	mg/kg	0.570	0.560	0.570	**1.33**	**1.03**	**1.20**
Chromium	mg/kg	**44.0**	**50**	**50.1**	**72.2**	**61.0**	**67.7**
Lead	mg/kg	**1,690**	**1,820**	**1,760**	**1,530**	**1,560**	**2,080**
Selenium	mg/kg	**4.68**	4.49	4.57	**5.25**	**7.35**	4.72
Silver	mg/kg	1.14	**1.39**	1.14	1.14	**1.54**	1.18
Mercury	mg/kg	**0.052**	**0.036**	**0.044**	**0.074**	**0.110**	**0.071**
TCLP Metals							
Arsenic	mg/L	0.025	0.025	0.025	0.025	0.025	0.025

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Barium	mg/L	**0.600**	**0.630**	**0.530**	**1.36**	**1.29**	**1.34**
Cadmium	mg/L	0.0063	0.0063	0.0063	**0.011**	**0.01**	**0.014**
Chromium	mg/L	0.013	0.013	0.013	**0.014**	0.013	0.013
Lead	mg/L	**7.72**	**10.6**	**7.96**	**2.90**	**5.00**	**5.40**
Selenium	mg/L	0.050	0.050	0.050	0.050	0.050	0.050
Silver	mg/L	0.013	0.013	0.013	0.013	0.013	0.013
Mercury	mg/L	0.000068	0.000068	0.000068	0.000068	0.000068	0.000068

The results of the analytical testing indicate relatively consistent results among the triplicate samples. Arsenic and lead are the primary contaminates of concern. The arsenic concentrations in the ST-N1 and ST-N2 range from 24.2 mg/kg to 27.2 mg/kg and 21.3 mg/kg to 25.9 mg/kg, respectively. The TCLP results indicate that Arsenic concentrations did not leach from the two north plant samples above MDLs. The total lead concentrations in the ST-N1 and ST-N2 range from 1,690 mg/kg to 1,820 mg/kg and 1,530 mg/kg to 2,080 mg/kg, respectively. The leachable lead in sample ST-N1 ranged from 7.7 mg/L to 10.6 mg/L. The leachable lead in sample ST-N2 ranged from 2.9 mg/L to 5.4 mg/L. The regulatory limit for non-hazardous waste disposal of lead is 5.0 mg/L. Based on the analytical results, both soil samples in the north plant area have leachable concentrations of lead above the non-hazardous waste disposal regulatory limit of 5.0. The remaining TCLP concentrations of RCRA metals were below the non-hazardous waste regulatory limits.

TABLE 2B

South Plant Untreated Analytical Testing
Total and TCLP Metals Analyses

		ST-S1			ST-S2			ST-S3		
		A	B	C	A	B	C	A	B	C
Analysis Name	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Moisture Content	%	**21.27**			**19.01**			**12.55**		
Soil pH	s.u.	**6.33**			**6.39**			**9.23**		
TCLP Extract pH	s.u.	5.41	5.52	5.63	5.93	5.21	5.43	6.05	4.65	3.63
Total Metals										
Arsenic	mg/kg	**19.1**	**17.2**	**21.5**	**20.8**	**21.2**	**18.6**	**5.80**	**7.17**	**8.98**
Barium	mg/kg	**370**	**344**	**302**	**144**	**132**	**143**	**682**	**578**	**703**
Cadmium	mg/kg	**2.99**	**2.40**	**2.52**	0.570	0.580	0.570	**7.16**	**9.88**	**12.2**
Chromium	mg/kg	**445**	**376**	**353**	**46**	**56**	**59**	**1,120**	**1,310**	**1,650**
Lead	mg/kg	**3,860**	**4,920**	**3,720**	**1,830**	**2,820**	**2,450**	**33,500**	**36,200**	**42,500**
Selenium	mg/kg	**5.02**	4.81	**5.11**	4.58	4.62	4.58	4.35	4.49	4.41
Silver	mg/kg	**23.4**	**24.6**	**18.5**	1.14	1.16	1.15	**1.14**	**1.12**	**1.29**
Mercury	mg/kg	**0.580**	**0.540**	**0.670**	**0.110**	**0.130**	**0.190**	**0.340**	**0.280**	**0.120**

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TCLP Metals

Arsenic	mg/L	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Barium	mg/L	**1.99**	**1.85**	**0.230**	**1.32**	**1.50**	**1.48**	**1.01**	**0.75**	**0.68**
Cadmium	mg/L	**0.032**	**0.026**	0.0063	**0.013**	**0.013**	**0.019**	0.0063	0.0063	0.0063
Chromium	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	**3.28**	**0.022**	**0.016**
Lead	mg/L	**4.37**	**2.74**	0.019	**6.43**	**7.83**	**8.77**	**1.09**	**0.660**	**0.340**
Selenium	mg/L	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Silver	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Mercury	mg/L	0.000068	0.000068	0.000068	0.000068	0.000068	0.000068	0.000068	0.000068	0.000068

The results of the analytical testing indicate relatively consistent results among the triplicate samples. The south plant sample ST-S3 is significantly higher in total lead concentrations than the samples from the two other south plant soil samples (ST-S1 and ST-S2) and the north plant soil samples. The arsenic concentrations in the ST-S1 and ST-S2 range from 17.2 mg/kg to 21.5 mg/kg and 132 mg/kg to 144 mg/kg, respectively. The TCLP results indicate that Arsenic concentrations did not leach from ST-S1 and ST-S2 above MDLs. The total lead concentrations in the ST-S1 and ST-S2 range from 3,720 mg/kg to 4,920 mg/kg and 1,830 mg/kg to 2,820 mg/kg, respectively. The leachable lead concentration in sample ST-S1 ranged from < 0.019 mg/L to 4.37 mg/L. The leachable lead in sample ST-S2 ranged from 6.43 mg/L to 8.77 mg/L. The total lead concentration in the south plant soil sample ST-S3 ranged from 33,500 mg/kg to 42,500 mg/kg. The TCLP lead concentration of lead in sample ST-S3 ranged from 0.34 mg/L to 1.09 mg/L. This low TCLP concentration for sample ST-S3 is suspected to be from the differing soil conditions. The total arsenic concentration in sample ST-S3 ranged from 5.8 mg/kg to 8.98 mg/L. The TCLP arsenic concentration was not detected above the MDL. The regulatory limit for non-hazardous waste disposal of lead is 5.0 mg/L. Based on the analytical results, only soil sample ST-S2 in the south plant area indicated TCLP concentrations for lead above the non-hazardous waste disposal regulatory limit of 5.0 mg/L. The remaining TCLP concentrations of RCRA metals were below the non-hazardous waste regulatory limits.

Mixture Development

KEMRON suggested to Golder Associates three reagents based on our experience from previous studies stabilizing lead and arsenic in soil. KEMRON suggested the following reagents:

REAGENT	SUPPLIER
EnviroBlend 90/10	Premier Magnesia, LLC.
EnviroBlend 93HR	Premier Magnesia, LLC.
Free Flow FF400	Free Flow Technologies, Ltd.

After reviewing the untreated analytical results and discussions with Premier Magnesia, LLC,

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KEMRON suggested reagent addition rates to Golder Associates that were expected to provide greater stability and adequately address variability in concentration and soil conditions. KEMRON developed the suggested mixture designs after Golder Associates approved the addition rates.

KEMRON prepared nine mixtures for each of the five soil samples (ST-N1, ST-N2, ST-S1, ST-S2, and ST-S3). The reagent addition was based on a wet weight reagent to soil ratio. For example, a mixture containing a 2% addition of Enviroblend 90/10, based on reagent weight, would be prepared by adding 2 grams of Enviroblend 90/10 for every 100 grams of untreated material used. The mixtures were dry mixed together until visually homogenized. The mixture development sheets are in **Appendix B**. The mixtures were submitted to GCAL for TCLP analysis of RCRA Metals by EPA Method 1311/6010/7470. The following table illustrates the analytical results for leachable lead as determined by TCLP analysis. The other RCRA metals were below the TCLP regulatory limits for disposal to a RCRA Subtitle D landfill. The complete analytical results are provided in **Table 3** at the end of the text.

Table 3A Preliminary Mixture Designs and TCLP Lead Results
North Plant Samples

Sample Number	Untreated Material Type	Reagent Type	Reagent Addition Based on Soil Wet Wt. (%)	TCLP Lead (mg/L)
0482-001	ST-N1	EnviroBlend 90 /10	2	**0.23 J**
0482-002	ST-N1	EnviroBlend 90 /10	4	0.019 U
0482-003	ST-N1	EnviroBlend 90 /10	6	0.019 U
0482-004	ST-N1	EnviroBlend 93 HR	2	0.019 U
0482-005	ST-N1	EnviroBlend 93 HR	4	0.019 U
0482-006	ST-N1	EnviroBlend 93 HR	6	0.019 U
0482-007	ST-N1	Free Flow FF400	2	**4.24**
0482-008	ST-N1	Free Flow FF400	4	**0.55**
0482-009	ST-N1	Free Flow FF400	6	0.019 U
0482-010	ST-N2	EnviroBlend 90 /10	2	**0.21 J**
0482-011	ST-N2	EnviroBlend 90 /10	4	0.019 U
0482-012	ST-N2	EnviroBlend 90 /10	6	0.019 U
0482-013	ST-N2	EnviroBlend 93 HR	2	0.019 U
0482-014	ST-N2	EnviroBlend 93 HR	4	0.019 U
0482-015	ST-N2	EnviroBlend 93 HR	6	0.019 U
0482-016	ST-N2	Free Flow FF400	2	**6.65**
0482-017	ST-N2	Free Flow FF400	4	**1.17**
0482-018	ST-N2	Free Flow FF400	6	**10.7**

Notes:
U = Not detected above the Method Detection Limit (MDL)
Analytes detected above the method detection limit (MDL) are presented as BOLD values.

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A review of the analytical results for the preliminary mixture designs for the north plant samples reveal that Enviroblend 90/10 and Enviroblend 93 HR at addition rates greater than 2% were effective at reducing the leachable concentration of lead in samples ST-N1 and ST-N2 below the regulatory limit of 5.0 mg/L for non-hazardous waste disposal. FF400 mixtures of 2% or greater reduced the leachable lead to below the regulatory limit in sample ST-N1. FF400 mixtures showed variable results in sample ST-N2. A mixture of 2% and 6% showed leachable lead exceeding the regulatory limits of 5.0 mg/L. However, a mixture of 4% FF400 in sample ST-N2 revealed a concentration of leachable lead of 1.17 mg/L, which is below the regulatory limit of 5.0 mg/L. A copy of the analytical report and TCLP pH logs are included in **Appendix C.**

Table 3B Preliminary Mixture Designs and TCLP Lead Results
South Plant Samples

Sample Number	Untreated Material Type	Reagent Type	Reagent Addition Based on Soil Wet Wt. (%)	TCLP Lead (mg/L)
0482-019	ST-S1	EnviroBlend 90 /10	2	**0.32 J**
0482-020	ST-S1	EnviroBlend 90 /10	4	0.019 U
0482-021	ST-S1	EnviroBlend 90 /10	6	0.69
0482-022	ST-S1	EnviroBlend 93 HR	2	**8.64**
0482-023	ST-S1	EnviroBlend 93 HR	4	**3.27**
0482-024	ST-S1	EnviroBlend 93 HR	6	0.019 U
0482-025	ST-S1	Free Flow FF400	2	**2.77**
0482-026	ST-S1	Free Flow FF400	4	**0.79**
0482-027	ST-S1	Free Flow FF400	6	**0.11 J**
0482-028	ST-S2	EnviroBlend 90 /10	2	**0.15 J**
0482-029	ST-S2	EnviroBlend 90 /10	4	0.019 U
0482-030	ST-S2	EnviroBlend 90 /10	6	**2.51**
0482-031	ST-S2	EnviroBlend 93 HR	2	**18.3**
0482-032	ST-S2	EnviroBlend 93 HR	4	**4.02**
0482-033	ST-S2	EnviroBlend 93 HR	6	0.019 U
0482-034	ST-S2	Free Flow FF400	2	**2.78**
0482-035	ST-S2	Free Flow FF400	4	**20.4**
0482-036	ST-S2	Free Flow FF400	6	**19.2**
0482-037	ST-S3	EnviroBlend 90 /10	3	**0.48 J**
0482-038	ST-S3	EnviroBlend 90 /10	5	**0.28 J**
0482-039	ST-S3	EnviroBlend 90 /10	7	**0.21 J**
0482-040	ST-S3	EnviroBlend 93 HR	4	**0.42 J**
0482-041	ST-S3	EnviroBlend 93 HR	6	0.019 U
0482-042	ST-S3	EnviroBlend 93 HR	8	0.019 U
0482-043	ST-S3	Free Flow FF400	4	**1.01**
0482-044	ST-S3	Free Flow FF400	6	**0.78**
0482-045	ST-S3	Free Flow FF400	8	**0.65**

Notes:

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U = Not detected above the Method Detection Limit (MDL)
Analytes detected above the method detection limit (MDL) are presented as BOLD values.

A review of the analytical results for the preliminary mixture designs for the south plant samples reveal that Enviroblend 90/10 at addition rates of 2% or greater was effective at reducing the leachable concentration of lead below the regulatory limit of 5.0 mg/L for non-hazardous waste disposal in samples ST-1, ST-S2. An Enviroblend 90/10 addition rate of 3% or greater for ST-S3 was effective at reducing the leachable concentration of lead below the regulatory limit of 5.0 mg/L for non-hazardous waste disposal. An Enviroblend 93HR addition rate of 4% or greater effectively reduced the leachable lead below the regulatory limit of 5.0 mg/L in each of the three south plant samples. FF400 mixtures of 2% or greater reduced the leachable lead to below the regulatory limit in sample ST-S1. FF400 mixtures showed variable results in sample ST-S2. A mixture of 4% and 6% showed leachable lead exceeding the regulatory limits of 5.0 mg/L, but an addition rate of 2% revealed a concentration below the regulatory limit. A mixture of 4% or greater of FF400 in sample ST-S-3 revealed a concentration of leachable lead below the regulatory limit of 5.0 mg/L. The complete analytical results are provided in **Table 3** at the end of the report text. The analytical report and pH logs for the preliminary mixtures are included in **Appendix C**.

Based on the results of the preliminary mixture designs, Golder Associates requested additional mixtures of each of the north and south plant samples. The mixtures included a 3% addition rate of Enviroblend 90/10 and a 2%, 3%, and 4% addition rate of Enviroblend CS, another product from Premier Magnesia. The mixture development sheets are included in **Appendix D**. The north plant and south plant samples were submitted to GCAL for TCLP analysis of RCRA Metals by EPA Method 1311/6010/7470. The following table summarizes the mixture designs and the TCLP lead results. Results for the remaining RCRA metals were below the non-hazardous regulatory limit of 5.0 mg/L. A comprehensive summary table of analytical results for the additional samples is included in **Table 4** at the end of the report text.

Table 4A Additional Mixture Designs and TCLP Lead Results
North Plant Samples

Sample Number	Untreated Material Type	Reagent Type	Reagent Addition Based on Soil Wet Wt. (%)	TCLP Lead (mg/L)
0482-046	ST-N1	Enviroblend 90/10	3	0.019 U
0482-047	ST-N1	Enviroblend CS	2	**0.17**
0482-048	ST-N1	Enviroblend CS	3	0.019 U
0482-049	ST-N1	Enviroblend CS	4	0.019 U
0482-050	ST-N2	Enviroblend 90/10	3	0.019 U
0482-051	ST-N2	Enviroblend CS	2	**0.39**
0482-052	ST-N2	Enviroblend CS	3	0.019 U

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0482-053	ST-N2	Enviroblend CS	4	0.019 U

Notes:
U = Not detected above the Method Detection Limit (MDL)
Analytes detected above the method detection limit (MDL) are presented as BOLD values.

A review of the analytical results for the additional mixture designs for the north plant samples reveal that Enviroblend 90/10 at an addition rate of 3% and Enviroblend CS at addition rates greater than 2% were effective at reducing the leachable concentration of lead in samples ST-N1 and ST-N2 below the regulatory limit of 5.0 mg/L for non-hazardous waste disposal. A copy of the analytical report and TCLP pH logs are included in **Appendix E.**

Table 4B Additional Mixture Designs and TCLP Lead Results
South Plant Samples

Sample Number	Untreated Material Type	Reagent Type	Reagent Addition Based on Soil Wet Wt. (%)	TCLP Lead (mg/L)
0482-054	ST-S1	Enviroblend 90/10	3	**1.89**
0482-055	ST-S1	Enviroblend CS	2	**0.81**
0482-056	ST-S1	Enviroblend CS	3	0.019 U
0482-057	ST-S1	Enviroblend CS	4	0.019 U
0482-058	ST-S2	Enviroblend 90/10	3	0.019 U
0482-059	ST-S2	Enviroblend CS	2	**0.091**
0482-060	ST-S2	Enviroblend CS	3	0.019 U
0482-061	ST-S2	Enviroblend CS	4	0.019 U
0482-062	ST-S3	Enviroblend 90/10	3	**0.13**
0482-063	ST-S3	Enviroblend CS	2	**0.16**
0482-064	ST-S3	Enviroblend CS	3	0.019 U
0482-065	ST-S3	Enviroblend CS	4	0.019 U

A review of the analytical results for the additional mixture designs for the south plant samples reveal that Enviroblend 90/10 at an addition rate of 3% and Enviroblend CS at addition rates greater than 2% were effective at reducing the leachable concentration of lead in samples ST-S1, ST-S2, and ST-S3 below the regulatory limit of 5.0 mg/L for non-hazardous waste disposal. A copy of the analytical report and TCLP pH logs are included in **Appendix E.**

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Treatability Results

The results of this treatability study indicate that a 2% dry addition mixture of EnviroBlend 90/10 or Enviroblend CS is effective in reducing the leachability of lead and other RCRA Metals in the provided soil samples from the north and south plants to levels acceptable for disposal at a RCRA Subtitle D Landfill (5.0 mg/L).

KEMRON Environmental Services, Inc. appreciates the opportunity to provide treatability testing for Golder Associates, Inc. Please contact us at 404-601-6927 if you have any questions concerning the information provided in this report.

Sincerely,

Tomecia N Riley

Tommy Jordan, P.G
Program Manager

Tomecia Riley
Chemical Engineer I

Attachments:
Table 1- Untreated Material Characterization, Physical Properties Testing
Table 2- Untreated Material Characterization, Total and TCLP RCRA Metals
Table 3- Preliminary Treated Analytical Results
Table 4- Additional Treated Analytical Results

Appendix A- Untreated Material Characterization
Appendix B- Preliminary Mixture Design Sheets
Appendix C- Preliminary Treated Analytical Report
Appendix D-Additional Mixture Design Sheets
Appendix E-Additional Treated Analytical Report

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TABLES

GOLDER ASSOCIATES, INC.
TRINITY NORTH AND SOUTH
PROJECT No. SH0482

TABLE 1

Untreated Physical Properties Testing

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE ID				
			ST-N1	ST-N2	ST-S1	ST-S2	ST-S3
Moisture Content	ASTM D2216						
ASTM Moisture Content		%	13.74	17.42	21.27	19.01	12.55
Percent Solids		%	87.92	85.16	82.47	84.03	88.85
pH	EPA 9045	s.u.	6.27	6.61	6.33	6.39	9.23

Notes
% = Percent
s.u. - Standard Units

GOLDER ASSOCIATES
TRINITY NORTH AND SOUTH ISS
PROJECT No: SH-04682

TABLE 2

UNTREATED MATERIAL CHARACTERIZATION
Total and TCLP Metals Analyses

Analysis Name	Units	ST-N1								
		A			B			C		
		Result	Qual.	RL	Result	Qual.	RL	Result	Qual.	RL
ASTM Moisture Content	%	**13.74**								
Soil pH	s.u.	**6.27**								
TCLP Extract pH	s.u.	6.11			5.13			5.44		
Total Metals										
Arsenic	mg/kg	**27.2**		2.28	**24.2**		2.25	**26.0**		2.29
Barium	mg/kg	**55.8**		1.14	**70.3**		1.12	**62.6**		1.14
Cadmium	mg/kg	0.570	U	0.57	0.560	U	0.560	0.570	U	0.570
Chromium	mg/kg	**44.0**		1.14	**50**		1.12	**50.1**		1.14
Lead	mg/kg	**1,690**		1.71	**1,820**		1.68	**1,760**		1.71
Selenium	mg/kg	**4.68**	J	4.55	4.49	U	4.49	4.57	U	4.57
Silver	mg/kg	1.14	U	1.14	**1.39**	J	1.12	1.14	U	1.14
Mercury	mg/kg	**0.052**		0.0044	**0.036**		0.0044	**0.044**		0.004
TCLP Metals										
Arsenic	mg/L	0.025	U	0.025	0.025	U	0.025	0.025	U	0.025
Barium	mg/L	**0.600**	J	0.013	**0.630**	J	0.013	**0.530**	J	0.013
Cadmium	mg/L	0.0063	U	0.0063	0.0063	U	0.0063	0.0063	U	0.0063
Chromium	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Lead	mg/L	**7.72**		0.019	**10.6**		0.019	**7.96**		0.019
Selenium	mg/L	0.050	U	0.050	0.050	U	0.05	0.050	U	0.05
Silver	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Mercury	mg/L	0.000068	U	0.000068	0.000068	U	0.000068	0.000068	U	0.000068

GOLDER ASSOCIATES
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TABLE 2

UNTREATED MATERIAL CHARACTERIZATION
Total and TCLP Metals Analyses

Analysis Name	Units	ST-N2								
		A			B			C		
		Result	Qual.	RL	Result	Qual.	RL	Result	Qual.	RL
ASTM Moisture Content	%	**17.42**								
Soil pH	s.u.	**6.61**								
TCLP Extract pH	s.u.	5.69			6.39			6.25		
Total Metals										
Arsenic	mg/kg	**22.9**		2.29	**21.3**		2.27	**25.9**		2.36
Barium	mg/kg	**221**		1.14	**181**		1.13	**221**		1.18
Cadmium	mg/kg	**1.33**	J	0.57	**1.03**	J	0.57	**1.20**	J	0.59
Chromium	mg/kg	**72.2**		1.14	**61.0**		1.13	**67.7**		1.18
Lead	mg/kg	**1,530**		1.72	**1,560**		1.7	**2,080**		1.77
Selenium	mg/kg	**5.25**	J	4.58	**7.35**	J	4.54	4.72	U	4.72
Silver	mg/kg	1.14	U	1.14	**1.54**	J	1.13	1.18	U	1.18
Mercury	mg/kg	**0.074**		0.0045	**0.110**		0.0037	**0.071**		0.0047
TCLP Metals										
Arsenic	mg/L	0.025	U	0.025	0.025	U	0.025	0.025	U	0.025
Barium	mg/L	**1.36**	J	0.013	**1.29**	J	0.013	**1.34**	J	0.013
Cadmium	mg/L	**0.011**	J	0.0063	**0.01**	J	0.0063	**0.014**	J	0.0063
Chromium	mg/L	**0.014**	J	0.013	0.013	U	0.013	0.013	U	0.013
Lead	mg/L	**2.90**		0.019	**5.00**		0.019	**5.40**		0.019
Selenium	mg/L	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050
Silver	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Mercury	mg/L	0.000068	U	0.000068	0.000068	U	0.000068	0.000068	U	0.000068

GOLDER ASSOCIATES
TRINITY NORTH AND SOUTH ISS
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TABLE 2

UNTREATED MATERIAL CHARACTERIZATION
Total and TCLP Metals Analyses

		ST-S1								
		A			B			C		
Analysis Name	**Units**	**Result**	**Qual.**	**RL**	**Result**	**Qual.**	**RL**	**Result**	**Qual.**	**RL**
Moisture Content	%	**21.27**								
Soil pH	s.u.	**6.33**								
TCLP Extract pH	s.u.	5.41			5.52			5.63		
Total Metals										
Arsenic	mg/kg	**19.1**		2.40	**17.2**		2.41	**21.5**		2.39
Barium	mg/kg	**370**		1.20	**344**		1.20	**302**		1.20
Cadmium	mg/kg	**2.99**		0.600	**2.40**	J	0.600	**2.52**		0.600
Chromium	mg/kg	**445**		1.20	**376**		1.20	**353**		1.20
Lead	mg/kg	**3,860**		1.80	**4,920**		1.80	**3,720**		1.79
Selenium	mg/kg	**5.02**	J	4.80	4.81	U	4.81	**5.11**	J	4.79
Silver	mg/kg	**23.4**		1.20	**24.6**		1.20	**18.5**		1.20
Mercury	mg/kg	**0.580**		0.0048	**0.540**		0.0047	**0.670**		0.0046
TCLP Metals										
Arsenic	mg/L	0.025	U	0.025	0.025	U	0.025	0.025	U	0.025
Barium	mg/L	**1.99**	J	0.013	**1.85**	J	0.013	**0.230**	J	0.013
Cadmium	mg/L	**0.032**	J	0.0063	**0.026**	J	0.0063	0.0063	U	0.0063
Chromium	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Lead	mg/L	**4.37**		0.019	**2.74**		0.019	0.019	U	0.019
Selenium	mg/L	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050
Silver	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Mercury	mg/L	0.000068	U	0.000068	0.000068	U	0.000068	0.000068	U	0.000068

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TABLE 2

UNTREATED MATERIAL CHARACTERIZATION
Total and TCLP Metals Analyses

		ST-S2								
		A			B			C		
Analysis Name	**Units**	**Result**	**Qual.**	**RL**	**Result**	**Qual.**	**RL**	**Result**	**Qual.**	**RL**
Moisture Content	%	**19.01**								
Soil pH	s.u.	**6.39**								
TCLP Extract pH	s.u.	5.93			5.21			5.43		
Total Metals										
Arsenic	mg/kg	**20.8**		2.29	**21.2**		2.31	**18.6**		2.29
Barium	mg/kg	**144**		1.14	**132**		1.16	**143**		1.15
Cadmium	mg/kg	0.570	U	0.570	0.580	U	0.580	0.570	U	0.570
Chromium	mg/kg	**46**		1.14	**56**		1.16	**59**		1.15
Lead	mg/kg	**1,830**		1.72	**2,820**		1.73	**2,450**		1.72
Selenium	mg/kg	4.58	U	4.58	4.62	U	4.62	4.58	U	4.58
Silver	mg/kg	1.14	U	1.14	1.16	U	1.16	1.15	U	1.15
Mercury	mg/kg	**0.110**		0.0042	**0.130**		0.0042	**0.190**		0.0042
TCLP Metals										
Arsenic	mg/L	0.025	U	0.025	0.025	U	0.025	0.025	U	0.025
Barium	mg/L	**1.32**	J	0.013	**1.50**	J	0.013	**1.48**	J	0.013
Cadmium	mg/L	**0.013**	J	0.0063	**0.013**	J	0.0063	**0.019**	J	0.0063
Chromium	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Lead	mg/L	**6.43**		0.019	**7.83**		0.019	**8.77**		0.019
Selenium	mg/L	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050
Silver	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Mercury	mg/L	0.000068	U	0.000068	0.000068	U	0.000068	0.000068	U	0.000068

GOLDER ASSOCIATES
TRINITY NORTH AND SOUTH ISS
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TABLE 2

UNTREATED MATERIAL CHARACTERIZATION
Total and TCLP Metals Analyses

Analysis Name	Units	ST-S3								
		A			B			C		
		Result	Qual.	RL	Result	Qual.	RL	Result	Qual.	RL
Moisture Content	%	12.55								
Soil pH	s.u.	9.23								
TCLP Extract pH	s.u.	6.05			4.65			3.63		
Total Metals										
Arsenic	mg/kg	**5.80**	J	2.17	**7.17**	J	2.24	**8.98**		2.21
Barium	mg/kg	**682**		1.09	**578**		1.12	**703**		1.10
Cadmium	mg/kg	**7.16**		0.540	**9.88**		0.560	**12.2**		0.550
Chromium	mg/kg	**1,120**		1.09	**1,310**		1.12	**1,650**		1.10
Lead	mg/kg	**33,500**		1.63	**36,200**		1.68	**42,500**		1.66
Selenium	mg/kg	4.35	U	4.35	4.49	U	4.49	4.41	U	4.41
Silver	mg/kg	**1.14**	J	1.09	**1.12**	J	1.12	**1.29**	J	1.10
Mercury	mg/kg	**0.340**		0.004	**0.280**		0.0044	**0.120**		0.0042
TCLP Metals										
Arsenic	mg/L	0.025	U	0.025	0.025	U	0.025	0.025	U	0.025
Barium	mg/L	**1.01**	J	0.013	**0.75**	J	0.013	**0.68**	J	0.013
Cadmium	mg/L	0.0063	U	0.0063	0.0063	U	0.0063	0.0063	U	0.0063
Chromium	mg/L	**3.28**		0.013	**0.022**	J	0.013	**0.016**	J	0.013
Lead	mg/L	**1.09**		0.019	**0.660**		0.019	**0.340**	J	0.019
Selenium	mg/L	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050
Silver	mg/L	0.013	U	0.013	0.013	U	0.013	0.013	U	0.013
Mercury	mg/L	0.000068	U	0.000068	0.000068	U	0.000068	0.000068	U	0.000068

Notes:
Analytes detected above the analytical RL are presented as **BOLD** values.
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
U = Not detected above the analytical RL .
RL = Analytical Reporting Limit
J = Estimated concentration detected below the analytical Reporting Limit and the MDL

GOLDER ASSOCIATES
TRINITY NORTH AND SOUTH ISS
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TABLE 3

PRELIMINARY TREATED ANALYTICAL CHARACTERIZATION
Total and TCLP Metals Analyses

Analysis Name	Units	TCLP Regulatory Limits	ST-N1			ST-N1			ST-N1		
			0482-001	0482-002	0482-003	0482-004	0482-005	0482-006	0482-007	0482-008	0482-009
			Env 90/10 2%	Env 90/10 4%	Env 90/10 6%	Env 93HR 2%	Env 93HR 4%	Env 93HR 6%	Free Flow 2%	Free Flow 4%	Free Flow 6
			Result	Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals											
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.39 J**	**0.039 J**	**0.04 J**	**0.25 J**	**0.26 J**	**0.34 J**	**0.24 J**	**0.19 J**	**0.11 J**
Cadmium	mg/L	1.0	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
Chromium	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	**0.032 J**	**0.013**	0.013 U	0.013 U
Lead	mg/L	5.0	**0.23 J**	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	**4.24**	**0.55**	0.019 U
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	**0.036 J**	**0.035 J**	**0.036 J**	**0.037 J**	**0.036 J**	0.013 U	**0.036 J**	**0.036 J**	**0.034 J**
Mercury	mg/L	0.2	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U

Analysis Name	Units	TCLP Regulatory Limits	ST-N2			ST-N2			ST-N2		
			0482-010	0482-011	0482-012	0482-013	0482-014	0482-015	0482-016	0482-017	0482-018
			Env 90/10 2%	Env 90/10 4%	Env 90/10 6%	Env 93HR 2%	Env 93HR 4%	Env 93HR 6%	Free Flow 2%	Free Flow 4%	Free Flow 6
			Result	Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals											
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.48 J**	**0.12 J**	**0.063 J**	**0.5 J**	**0.84 J**	**0.7 J**	**0.96 J**	**0.48 J**	**0.28 J**
Cadmium	mg/L	1.0	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	**0.013 J**	**0.0074 J**	**0.019 J**
Chromium	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	**0.042 J**	**0.016 J**	0.013 U	**0.14 J**
Lead	mg/L	5.0	**0.21 J**	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	**6.65**	**1.17**	**10.7**
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	**0.039 J**	**0.041 J**	**0.037 J**	**0.04 J**	0.039 U	0.013 U	0.013 U	0.013 U	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068

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TABLE 3

PRELIMINARY TREATED ANALYTICAL CHARACTERIZATION
Total and TCLP Metals Analyses

Analysis Name	Units	TCLP Regulatory Limits	ST-S1			ST-S1			ST-S1		
			0482-019	0482-020	0482-021	0482-022	0482-023	0482-024	0482-025	0482-026	0482-027
			Env 90/10 2%	Env 90/10 4%	Env 90/10 6%	Env 93HR 2%	Env 93HR 4%	Env 93HR 6%	Free Flow 2%	Free Flow 4%	Free Flow
			Result	Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals											
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**1.27 J**	**0.12 J**	**0.92 J**	**2.63 J**	**2.12 J**	**1.23 J**	**0.25 J**	**0.19 J**	**0.17 J**
Cadmium	mg/L	1.0	**0.017 J**	0.0063 U	0.0063 U	0.06	**0.025 J**	0.0063 U	**0.033 J**	**0.022 J**	**0.012 J**
Chromium	mg/L	5.0	0.013 U	0.013 U	**0.02 J**	**0.17 J**	0.013 U	**0.033 J**	0.013 U	0.013 U	0.013 U
Lead	mg/L	5.0	**0.32 J**	0.019 U	0.69	**8.64**	**3.27**	0.019 U	**2.77**	**0.79**	**0.11 J**
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	**0.054 J**	0.05 U	0.05 U	0.05 U	**0.051 J**
Silver	mg/L	5.0	0.013U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	**0.041 J**	**0.039 J**	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	0.000068 U	0.000068U	0.000068 U	0.000068 U	0.000068 U	**0.00015 J**	0.000068 U

Analysis Name	Units	TCLP Regulatory Limits	ST-S2			ST-S2			ST-S2		
			0482-028	0482-029	0482-030	0482-031	0482-032	0482-033	0482-034	0482-035	0482-036
			Env 90/10 2%	Env 90/10 4%	Env 90/10 6%	Env 93HR 2%	Env 93HR 4%	Env 93HR 6%	Free Flow 2%	Free Flow 4%	Free Flow 6
			Result	Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals											
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.64 J**	**0.12 J**	**1.13 J**	**1.82 J**	**1.56 J**	**0.52 J**	**0.44 J**	**0.4 J**	**0.41 J**
Cadmium	mg/L	1.0	0.0063 U	0.0063 U	**0.0088 J**	**0.015 J**	**0.0077 J**	0.0063U	**0.012 J**	**0.019 J**	**0.018 J**
Chromium	mg/L	5.0	0.013 U	0.013 U	0.013 U	**0.017 J**	0.013 U	0.013 U	0.013 U	**0.038 J**	**0.042 J**
Lead	mg/L	5.0	**0.15 J**	0.019 U	**2.51**	18.3	**4.02**	0.019 U	**2.78**	**20.4**	**19.2**
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	**0.00016 J**	**0.0005 J**	0.000068 U	0.000068 U	**0.00028 J**	0.000068 U	0.000068 U

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TABLE 3

PRELIMINARY TREATED ANALYTICAL CHARACTERIZATION
Total and TCLP Metals Analyses

Analysis Name	Units	TCLP Regulatory Limits	ST-S3			ST-S3			ST-S3		
			0482-037	0482-038	0482-039	0482-040	0482-041	0482-042	0482-043	0482-044	0482-045
			Env 90/10 3%	Env 90/10 5%	Env 90/10 7%	Env 93HR 4%	Env 93HR 6%	Env 93HR 8%	Free Flow 4%	Free Flow 6%	Free Flow 8
			Result	Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals											
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.58 J**	**0.49 J**	**0.38 J**	**0.68 J**	**0.71 J**	**0.91 J**	**0.56 J**	**0.42 J**	**0.34 J**
Cadmium	mg/L	1.0	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
Chromium	mg/L	5.0	**0.73**	**0.16 J**	**0.027 J**	**0.023 J**	**1.29**	**2.99**	**8.59**	**6.04**	**3.69**
Lead	mg/L	5.0	**0.48 J**	**0.28 J**	**0.21 J**	**0.42 J**	0.019 U	0.019 U	**1.01**	**0.78**	**0.65**
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	0.000068 U	**0.00011 J**	0.000068 U	**0.000084 J**	**0.0001 J**	**0.00017 J**	**0.00031 J**

Notes:
Analytes detected above the method detection limit (MDL) are presented as **BOLD** values.
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
U = Not detected above the Method Detection Limit (MDL)
RL = Analytical Reporting Limit
J = Estimated concentration detected below the analytical Reporting Limit but above the MDL

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TABLE 4

ADDITIONAL TREATED ANALYTICAL CHARACTERIZATION
TCLP Metals Analyses

Analysis Name	Units	TCLP Regulatory Limits	ST-N1				ST-N2			
			0482-046	0482-047	0482-048	0482-049	0482-050	0482-051	0482-052	0482-05
			Env 90/10 3%	Env CS 2%	Env CS 3%	Env CS 4%	Env 90/10 3%	Env CS 2%	Env CS 3%	Env CS 4
			Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals										
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.078**	**0.43**	**0.23**	**0.26**	0.36	**1.08**	**0.82**	**0.41**
Cadmium	mg/L	1.0	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
Chromium	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	**0.039**	**0.048**
Lead	mg/L	5.0	0.019 U	**0.17**	0.019 U	0.019 U	0.019 U	**0.39**	0.019 U	0.019 U
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	**0.000071**	0.000068 U	0.000068 U	0.000068 U	**0.000072**	**0.00008**

Analysis Name	Units	TCLP Regulatory Limits	ST-S1				ST-S2			
			0482-054	0482-055	0482-056	0482-057	0482-058	0482-059	0482-060	0482-06
			Env 90/10 3%	Env CS 2%	Env CS 3%	Env CS 4%	Env 90/10 3%	Env CS 2%	Env CS 3%	Env CS 4
			Result	Result	Result	Result	Result	Result	Result	Result
TCLP Metals										
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.88**	**1.46**	**0.75**	**0.67**	**0.31**	**0.77**	**0.41**	**0.34**
Cadmium	mg/L	1.0	**0.012**	**0.013**	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
Chromium	mg/L	5.0	0.013 U	0.013 U	**0.016**	**0.024**	0.013 U	0.013 U	0.013 U	0.013 U
Lead	mg/L	5.0	**1.89**	**0.81**	0.019 U	0.019 U	0.019 U	**0.091**	0.019 U	0.019 U
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	0.000068 U	**0.00008**	0.000068

Analysis Name	Units	TCLP Regulatory Limits	ST-S3			
			0482-062	0482-063	0482-064	0482-065
			Env 90/10 3%	Env CS 2%	Env CS 3%	Env CS 4%
			Result	Result	Result	Result
TCLP Metals						
Arsenic	mg/L	5.0	0.025 U	0.025 U	0.025 U	0.025 U
Barium	mg/L	100	**0.53**	**0.58**	**0.53**	**0.46**
Cadmium	mg/L	1.0	0.0063 U	0.0063 U	0.0063 U	0.0063 U
Chromium	mg/L	5.0	0.013 U	0.013 U	**1.06**	0.013 U
Lead	mg/L	5.0	**0.13**	**0.16**	0.019 U	0.019 U
Selenium	mg/L	1.0	0.05 U	0.05 U	0.05 U	0.05 U
Silver	mg/L	5.0	0.013 U	0.013 U	0.013 U	0.013 U
Mercury	mg/L	0.2	0.000068 U	0.000068 U	0.000068 U	0.000068 U

Notes:
Analytes detected above the analytical method detection limit are presented as **BOLD** values.
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
U = Not detected above the analytical RL .
RL = Analytical Reporting Limit
J = Estimated concentration detected below the analytical Reporting Limit but above the method detection limit

APPENDIX A

UNTREATED CHARACTERIZATION

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
SAMPLE No.:	ST-N1
TESTING DATE:	05/15/13
TESTED BY:	RPH
TRACKING CODE:	8949

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2833	g	1.2840	g	1.2826	g
3. WT WET SOIL + TARE	19.8692	g	20.6439	g	24.0647	g
4. WT DRY SOIL + TARE	17.6191	g	18.3208	g	21.3026	g
5. WT WATER, Ww	2.2501	g	2.3231	g	2.7621	g
6. WT DRY SOIL, Ws	16.3358	g	17.0368	g	20.0200	g
7. ASTM MOISTURE CONTENT	13.77	%	13.64	%	13.80	%
8. PERCENT SOLIDS	87.89	%	88.00	%	87.88	%
9. AVERAGE ASTM MOISTURE CONTENT	13.74	%				
10. AVERAGE PERCENT SOLIDS	87.92	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
TESTING DATE:	5/15/2013
TESTED BY:	RPH
TRACKING CODE:	8949

KEMRON SAMPLE No.	MATERIAL pH
1. ST-N1	6.27
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.27

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
SAMPLE No.:	ST-N2
TESTING DATE:	05/15/13
TESTED BY:	RPH
TRACKING CODE:	8950

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2815	g	1.2657	g	1.2670	g
3. WT WET SOIL + TARE	13.6224	g	13.9384	g	12.1152	g
4. WT DRY SOIL + TARE	11.8156	g	12.0117	g	10.5238	g
5. WT WATER, Ww	1.8068	g	1.9267	g	1.5914	g
6. WT DRY SOIL, Ws	10.5341	g	10.7460	g	9.2568	g
7. ASTM MOISTURE CONTENT	17.15	%	17.93	%	17.19	%
8. PERCENT SOLIDS	85.36	%	84.80	%	85.33	%
9. AVERAGE ASTM MOISTURE CONTENT	17.42	%				
10. AVERAGE PERCENT SOLIDS	85.16	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
TESTING DATE:	5/15/2013
TESTED BY:	RPH
TRACKING CODE:	8950

KEMRON SAMPLE No.	MATERIAL pH
1. ST-N2	6.61
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.61

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
SAMPLE No.:	ST-S1
TESTING DATE:	05/15/13
TESTED BY:	RPH
TRACKING CODE:	8951

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2600	g	1.2841	g	1.2821	g
3. WT WET SOIL + TARE	9.9226	g	9.5803	g	9.7316	g
4. WT DRY SOIL + TARE	8.3842	g	8.0671	g	8.3296	g
5. WT WATER, Ww	1.5384	g	1.5132	g	1.4020	g
6. WT DRY SOIL, Ws	7.1242	g	6.7830	g	7.0475	g
7. ASTM MOISTURE CONTENT	21.59	%	22.31	%	19.89	%
8. PERCENT SOLIDS	82.24	%	81.76	%	83.41	%
9. AVERAGE ASTM MOISTURE CONTENT	21.27	%				
10. AVERAGE PERCENT SOLIDS	82.47	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
TESTING DATE:	5/15/2013
TESTED BY:	RPH
TRACKING CODE:	8951

KEMRON SAMPLE No.	MATERIAL pH
1. ST-S1	6.33
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.33

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
SAMPLE No.:	ST-S2
TESTING DATE:	05/15/13
TESTED BY:	RPH
TRACKING CODE:	8952

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2763	g	1.2549	g	1.2578	g
3. WT WET SOIL + TARE	12.9382	g	13.6574	g	11.8656	g
4. WT DRY SOIL + TARE	10.9851	g	11.7300	g	10.2076	g
5. WT WATER, Ww	1.9531	g	1.9274	g	1.6580	g
6. WT DRY SOIL, Ws	9.7088	g	10.4751	g	8.9498	g
7. ASTM MOISTURE CONTENT	20.12	%	18.40	%	18.53	%
8. PERCENT SOLIDS	83.25	%	84.46	%	84.37	%
9. AVERAGE ASTM MOISTURE CONTENT	19.01	%				
10. AVERAGE PERCENT SOLIDS	84.03	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
TESTING DATE:	5/15/2013
TESTED BY:	RPH
TRACKING CODE:	8952

KEMRON SAMPLE No.	MATERIAL pH
1. ST-S2	6.39
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.39

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
SAMPLE No.:	ST-S3
TESTING DATE:	05/15/13
TESTED BY:	RPH
TRACKING CODE:	8953

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2616	g	1.2690	g	1.2731	g
3. WT WET SOIL + TARE	12.4798	g	13.6696	g	13.9453	g
4. WT DRY SOIL + TARE	11.1541	g	12.2604	g	12.6455	g
5. WT WATER, Ww	1.3257	g	1.4092	g	1.2998	g
6. WT DRY SOIL, Ws	9.8925	g	10.9914	g	11.3724	g
7. ASTM MOISTURE CONTENT	13.40	%	12.82	%	11.43	%
8. PERCENT SOLIDS	88.18	%	88.64	%	89.74	%
9. AVERAGE ASTM MOISTURE CONTENT	12.55	%				
10. AVERAGE PERCENT SOLIDS	88.85	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	Trinity North & South ISS
PROJECT No.:	SH0482
TESTING DATE:	5/15/2013
TESTED BY:	RPH
TRACKING CODE:	8953

KEMRON SAMPLE No.	MATERIAL pH
1. ST-S3	9.23
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	9.23

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 05/16/2013

GCAL Report 213050756

Deliver To	KEMRON 1359A Ellsworth Industrial Blv Atlanta, GA 30318 404-601-6927
Attn	Tommy Jordan

Project Trinity North & South / SH0482

CASE NARRATIVE

Client: KEMRON **Report:** 213050756

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

METALS

In the SW-846 1311/6010C analysis, all samples were analyzed at a dilution. The reporting limits are at or below the regulatory limits at this dilution.

In the SW-846 6010C analysis, a chemical or physical interference necessitated a dilution for all samples. This is reflected in the elevated detection limits.

In the SW-846 6010C analysis for prep batch 506879, the MS/MSD spike recoveries and RPDs are not applicable because the spike was diluted out of the samples. All LCS recoveries are acceptable.

In the SW-846 7471B analysis for prep batch 506880, the MS and/or MSD recovery is outside the control limits for Mercury. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature

GCAL REPORT 213050756

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305075601	ST-N1 (A)	Solid	05/06/2013 14:45	05/07/2013 09:20
21305075602	ST-N1 (A) (TCLP)	Solid	05/06/2013 14:45	05/07/2013 09:20
21305075603	ST-N1 (B)	Solid	05/06/2013 14:46	05/07/2013 09:20
21305075604	ST-N1 (B) (TCLP)	Solid	05/06/2013 14:46	05/07/2013 09:20
21305075605	ST-N1 (C)	Solid	05/06/2013 14:47	05/07/2013 09:20
21305075606	ST-N1 (C) (TCLP)	Solid	05/06/2013 14:47	05/07/2013 09:20
21305075607	ST-N2 (A)	Solid	05/06/2013 14:50	05/07/2013 09:20
21305075608	ST-N2 (A) (TCLP)	Solid	05/06/2013 14:50	05/07/2013 09:20
21305075609	ST-N2 (B) (TCLP)	Solid	05/06/2013 14:51	05/07/2013 09:20
21305075610	ST-N2 (B)	Solid	05/06/2013 14:51	05/07/2013 09:20
21305075611	ST-N2 (C)	Solid	05/06/2013 14:52	05/07/2013 09:20
21305075612	ST-N2 (C) (TCLP)	Solid	05/06/2013 14:52	05/07/2013 09:20
21305075613	ST-S1 (A)	Solid	05/06/2013 15:15	05/07/2013 09:20
21305075614	ST-S1 (A) (TCLP)	Solid	05/06/2013 15:15	05/07/2013 09:20
21305075615	ST-S1 (B)	Solid	05/06/2013 15:16	05/07/2013 09:20
21305075616	ST-S1 (B) (TCLP)	Solid	05/06/2013 15:16	05/07/2013 09:20
21305075617	ST-S1 (C)	Solid	05/06/2013 15:17	05/07/2013 09:20
21305075618	ST-S1 (C) (TCLP)	Solid	05/06/2013 15:17	05/07/2013 09:20
21305075619	ST-S2 (A)	Solid	05/06/2013 15:20	05/07/2013 09:20
21305075620	ST-S2 (A) (TCLP)	Solid	05/06/2013 15:20	05/07/2013 09:20
21305075621	ST-S2 (B)	Solid	05/06/2013 15:21	05/07/2013 09:20
21305075622	ST-S2 (B) (TCLP)	Solid	05/06/2013 15:21	05/07/2013 09:20
21305075623	ST-S2 (C)	Solid	05/06/2013 15:22	05/07/2013 09:20
21305075624	ST-S2 (C) (TCLP)	Solid	05/06/2013 15:22	05/07/2013 09:20
21305075625	ST-S3 (A)	Solid	05/06/2013 16:00	05/07/2013 09:20
21305075626	ST-S3 (A) (TCLP)	Solid	05/06/2013 16:00	05/07/2013 09:20
21305075627	ST-S3 (B)	Solid	05/06/2013 16:01	05/07/2013 09:20
21305075628	ST-S3 (B) (TCLP)	Solid	05/06/2013 16:01	05/07/2013 09:20
21305075629	ST-S3 (C)	Solid	05/06/2013 16:02	05/07/2013 09:20
21305075630	ST-S3 (C) (TCLP)	Solid	05/06/2013 16:02	05/07/2013 09:20

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756001	ST-N1 (A)	Solid	05/06/2013 14:46	05/07/2013 09:20

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.052	0.013	0.0044	mg/kg

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	27.2	9.11	2.28	mg/kg
7440-39-3	Barium	55.8	4.55	1.14	mg/kg
7440-47-3	Chromium	44.0	4.55	1.14	mg/kg
7439-92-1	Lead	1690	6.83	1.71	mg/kg
7782-49-2	Selenium	4.68J	18.2	4.55	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756002	ST-N1 (A) (TCLP)	Solid	05/06/2013 14:46	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.60J	5.00	0.013	mg/L
7439-92-1	Lead	7.72	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756003	ST-N1 (B)	Solid	05/06/2013 14:46	05/07/2013 09:20

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.036	0.013	0.0044	mg/kg

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	24.2	8.98	2.25	mg/kg
7440-39-3	Barium	70.3	4.49	1.12	mg/kg
7440-47-3	Chromium	50.0	4.49	1.12	mg/kg
7439-92-1	Lead	1820	6.74	1.68	mg/kg
7440-22-4	Silver	1.39J	4.49	1.12	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756004	ST-N1 (B) (TCLP)	Solid	05/06/2013 14:46	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.63J	5.00	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756004	ST-N1 (S) (TCLP)	Solid	05/06/2013 14:46	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	10.6	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756006	ST-N1 (S)	Solid	05/06/2013 14:47	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	26.0	9.15	2.29	mg/kg
7440-39-3	Barium	62.6	4.57	1.14	mg/kg
7440-47-3	Chromium	50.1	4.57	1.14	mg/kg
7439-92-1	Lead	1760	6.86	1.71	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.044	0.012	0.0040	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756008	ST-N1 (S) (TCLP)	Solid	05/06/2013 14:47	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.53J	5.00	0.013	mg/L
7439-92-1	Lead	7.96	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756007	ST-N2 (S)	Solid	05/06/2013 14:50	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	22.9	9.15	2.29	mg/kg
7440-39-3	Barium	221	4.58	1.14	mg/kg
7440-43-9	Cadmium	1.33J	2.29	0.57	mg/kg
7440-47-3	Chromium	72.2	4.58	1.14	mg/kg
7439-92-1	Lead	1530	6.87	1.72	mg/kg
7782-49-2	Selenium	5.25J	18.3	4.58	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.074	0.014	0.0045	mg/kg

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (A) (TCLP)	Solid	05/06/2013 14:50	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.36J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.011J	0.050	0.0063	mg/L
7440-47-3	Chromium	0.014J	0.25	0.013	mg/L
7439-92-1	Lead	2.90	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (B) (TCLP)	Solid	05/06/2013 14:51	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.29J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.010J	0.050	0.0063	mg/L
7439-92-1	Lead	5.00	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (B)	Solid	05/06/2013 14:51	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	21.3	9.08	2.27	mg/kg
7440-39-3	Barium	181	4.54	1.13	mg/kg
7440-43-9	Cadmium	1.03J	2.27	0.57	mg/kg
7440-47-3	Chromium	61.0	4.54	1.13	mg/kg
7439-92-1	Lead	1560	6.81	1.70	mg/kg
7782-49-2	Selenium	7.35J	18.2	4.54	mg/kg
7440-22-4	Silver	1.54J	4.54	1.13	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.11	0.011	0.0037	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (C)	Solid	05/06/2013 14:52	05/07/2013 09:20

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.071	0.014	0.0047	mg/kg

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (C)	Solid	05/06/2013 14:52	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	25.9	9.44	2.36	mg/kg
7440-39-3	Barium	221	4.72	1.18	mg/kg
7440-43-9	Cadmium	1.20J	2.36	0.59	mg/kg
7440-47-3	Chromium	67.7	4.72	1.18	mg/kg
7439-92-1	Lead	2080	7.08	1.77	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (C) (TCLP)	Solid	05/06/2013 14:52	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.34J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.014J	0.050	0.0063	mg/L
7439-92-1	Lead	5.40	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (A)	Solid	05/06/2013 16:15	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	19.1	9.60	2.40	mg/kg
7440-39-3	Barium	370	4.80	1.20	mg/kg
7440-43-9	Cadmium	2.99	2.40	0.60	mg/kg
7440-47-3	Chromium	445	4.80	1.20	mg/kg
7439-92-1	Lead	3860	7.20	1.80	mg/kg
7782-49-2	Selenium	5.02J	19.2	4.80	mg/kg
7440-22-4	Silver	23.4	4.80	1.20	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.58	0.014	0.0048	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (A) (TCLP)	Solid	05/06/2013 16:15	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.99J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.032J	0.050	0.0063	mg/L
7439-92-1	Lead	4.37	0.50	0.019	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (B)	Solid	05/06/2013 15:16	05/07/2013 09:20

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.54	0.014	0.0047	mg/kg

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	17.2	9.62	2.41	mg/kg
7440-39-3	Barium	344	4.81	1.20	mg/kg
7440-43-9	Cadmium	2.40J	2.41	0.60	mg/kg
7440-47-3	Chromium	376	4.81	1.20	mg/kg
7439-92-1	Lead	4920	7.22	1.80	mg/kg
7440-22-4	Silver	24.6	4.81	1.20	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (B) (TCLP)	Solid	05/06/2013 15:16	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.85J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.026J	0.050	0.0063	mg/L
7439-92-1	Lead	2.74	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (C)	Solid	05/06/2013 15:17	05/07/2013 09:20

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.67	0.014	0.0046	mg/kg

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	21.5	9.57	2.39	mg/kg
7440-39-3	Barium	302	4.79	1.20	mg/kg
7440-43-9	Cadmium	2.52	2.39	0.60	mg/kg
7440-47-3	Chromium	353	4.79	1.20	mg/kg
7439-92-1	Lead	3720	7.18	1.79	mg/kg
7782-49-2	Selenium	5.11J	19.1	4.79	mg/kg
7440-22-4	Silver	18.5	4.79	1.20	mg/kg

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (A) (TCLP)	Solid	05/06/2013 19:17	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.23J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S2 (B)	Solid	05/06/2013 19:20	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	20.8	9.16	2.29	mg/kg
7440-39-3	Barium	144	4.58	1.14	mg/kg
7440-47-3	Chromium	46.1	4.58	1.14	mg/kg
7439-92-1	Lead	1830	6.87	1.72	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.11	0.013	0.0042	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S2 (A) (TCLP)	Solid	05/06/2013 19:20	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.32J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.013J	0.050	0.0063	mg/L
7439-92-1	Lead	6.43	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S3 (B)	Solid	05/06/2013 19:21	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	21.2	9.25	2.31	mg/kg
7440-39-3	Barium	132	4.62	1.16	mg/kg
7440-47-3	Chromium	56.0	4.62	1.16	mg/kg
7439-92-1	Lead	2820	6.93	1.73	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.13	0.013	0.0042	mg/kg

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]22	ST-S2 (B) (TCLP)	Solid	05/06/2013 15:24	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.50J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.013J	0.050	0.0063	mg/L
7439-92-1	Lead	7.83	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]23	ST-S2 (C)	Solid	05/06/2013 15:22	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	18.6	9.16	2.29	mg/kg
7440-39-3	Barium	143	4.58	1.15	mg/kg
7440-47-3	Chromium	59.3	4.58	1.15	mg/kg
7439-92-1	Lead	2450	6.87	1.72	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.19	0.013	0.0042	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]24	ST-S2 (C) (TCLP)	Solid	05/06/2013 15:22	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.48J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.019J	0.050	0.0063	mg/L
7439-92-1	Lead	8.77	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]25	ST-S3 (A)	Solid	05/06/2013 16:00	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	5.80J	8.69	2.17	mg/kg
7440-39-3	Barium	682	4.35	1.09	mg/kg
7440-43-9	Cadmium	7.16	2.17	0.54	mg/kg
7440-47-3	Chromium	1120	4.35	1.09	mg/kg
7439-92-1	Lead	33500	6.52	1.63	mg/kg
7440-22-4	Silver	1.14J	4.35	1.09	mg/kg

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S3 (A)	Solid	05/06/2013 16:00	05/07/2013 09:20

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.34	0.012	0.0040	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S3 (A) (TCLP)	Solid	05/06/2013 16:00	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.01J	5.00	0.013	mg/L
7440-47-3	Chromium	3.28	0.25	0.013	mg/L
7439-92-1	Lead	1.09	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S4 (A)	Solid	05/06/2013 16:01	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	7.17J	8.97	2.24	mg/kg
7440-39-3	Barium	578	4.49	1.12	mg/kg
7440-43-9	Cadmium	9.88	2.24	0.56	mg/kg
7440-47-3	Chromium	1310	4.49	1.12	mg/kg
7439-92-1	Lead	36200	6.73	1.68	mg/kg
7440-22-4	Silver	1.12J	4.49	1.12	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.28	0.013	0.0044	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S4 (A) (TCLP)	Solid	05/06/2013 16:01	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.75J	5.00	0.013	mg/L
7440-47-3	Chromium	0.022J	0.25	0.013	mg/L
7439-92-1	Lead	0.66	0.50	0.019	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756629	ST-S3 (C)	Solid	05/06/2013 16:02	05/07/2013 09:20

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	8.98	8.83	2.21	mg/kg
7440-39-3	Barium	703	4.41	1.10	mg/kg
7440-43-9	Cadmium	12.2	2.21	0.55	mg/kg
7440-47-3	Chromium	1650	4.41	1.10	mg/kg
7439-92-1	Lead	42500	6.62	1.66	mg/kg
7440-22-4	Silver	1.29J	4.41	1.10	mg/kg

SW-846 7471B

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.12	0.013	0.0042	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756630	ST-S3 (C) (TCLP)	Solid	05/06/2013 16:02	05/07/2013 09:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.68J	5.00	0.013	mg/L
7440-47-3	Chromium	0.016J	0.25	0.013	mg/L
7439-92-1	Lead	0.34J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756001	[illegible]	Solid	05/06/2013 14:45	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 17:54	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.052**	**0.013**	**0.0044**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 11:47	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**27.2**	**9.11**	**2.28**	**mg/kg**
7440-39-3	**Barium**	**55.8**	**4.55**	**1.14**	**mg/kg**
7440-43-9	Cadmium	0.57U	2.28	0.57	mg/kg
7440-47-3	**Chromium**	**44.0**	**4.55**	**1.14**	**mg/kg**
7439-92-1	**Lead**	**1690**	**6.83**	**1.71**	**mg/kg**
7782-49-2	**Selenium**	**4.68J**	**18.2**	**4.55**	**mg/kg**
7440-22-4	Silver	1.14U	4.55	1.14	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756002	ST-N4 (A) (TCLP)	Solid	05/06/2013 14:45	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:28	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 00:45	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.60J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	**7.72**	**0.50**	**0.019**	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N1 (E)	Solid	05/08/2013 14:40	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 17:55	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.036**	**0.013**	**0.0044**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 11:53	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**24.2**	**8.98**	**2.25**	**mg/kg**
7440-39-3	**Barium**	**70.3**	**4.49**	**1.12**	**mg/kg**
7440-43-9	Cadmium	0.56U	2.25	0.56	mg/kg
7440-47-3	**Chromium**	**50.0**	**4.49**	**1.12**	**mg/kg**
7439-92-1	**Lead**	**1820**	**6.74**	**1.68**	**mg/kg**
7782-49-2	Selenium	4.49U	18.0	4.49	mg/kg
7440-22-4	**Silver**	**1.39J**	**4.49**	**1.12**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756004	ST-N1 (F) (TCLP)	Solid	05/06/2013 14:46	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:30	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 00:53	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.63J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	**10.6**	**0.50**	**0.019**	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
2430507[illegible]	ST-N1 (C)	Solid	05/08/2013 14:47	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 17:57	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.044**	**0.012**	**0.0040**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:00	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**26.0**	**9.15**	**2.29**	**mg/kg**
7440-39-3	**Barium**	**62.6**	**4.57**	**1.14**	**mg/kg**
7440-43-9	Cadmium	0.57U	2.29	0.57	mg/kg
7440-47-3	**Chromium**	**50.1**	**4.57**	**1.14**	**mg/kg**
7439-92-1	**Lead**	**1760**	**6.86**	**1.71**	**mg/kg**
7782-49-2	Selenium	4.57U	18.3	4.57	mg/kg
7440-22-4	Silver	1.14U	4.57	1.14	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:32	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 01:01	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.53J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
[redacted]	[redacted]	**7.96**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (A)	Soil	05/06/2013 14:50	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 17:59	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.074**	**0.014**	**0.0045**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:20	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**22.9**	**9.15**	**2.29**	**mg/kg**
7440-39-3	**Barium**	**221**	**4.58**	**1.14**	**mg/kg**
7440-43-9	**Cadmium**	**1.33J**	**2.29**	**0.57**	**mg/kg**
7440-47-3	**Chromium**	**72.2**	**4.58**	**1.14**	**mg/kg**
7439-92-1	**Lead**	**1530**	**6.87**	**1.72**	**mg/kg**
7782-49-2	**Selenium**	**5.25J**	**18.3**	**4.58**	**mg/kg**
7440-22-4	Silver	1.14U	4.58	1.14	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:34	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 01:09	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.36J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.011J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.014J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**2.90**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
[illegible]	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:36	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 01:17	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.29J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.010J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
[redacted]	[redacted]	**5.00**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756-10	S1-N2 (R)	Solid	05/06/2013 14:51	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 17:47	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.11	0.011	0.0037	mg/kg

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 11:12	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	21.3	9.08	2.27	mg/kg
7440-39-3	Barium	181	4.54	1.13	mg/kg
7440-43-9	Cadmium	1.03J	2.27	0.57	mg/kg
7440-47-3	Chromium	61.0	4.54	1.13	mg/kg
7439-92-1	Lead	1560	6.81	1.70	mg/kg
7782-49-2	Selenium	7.35J	18.2	4.54	mg/kg
7440-22-4	Silver	1.54J	4.54	1.13	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-N2 (5)	Solid	05/08/2013 14:52	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:01	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.071**	**0.014**	**0.0047**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:27	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**25.9**	**9.44**	**2.36**	**mg/kg**
7440-39-3	**Barium**	**221**	**4.72**	**1.18**	**mg/kg**
7440-43-9	**Cadmium**	**1.20J**	**2.36**	**0.59**	**mg/kg**
7440-47-3	**Chromium**	**67.7**	**4.72**	**1.18**	**mg/kg**
7439-92-1	**Lead**	**2080**	**7.08**	**1.77**	**mg/kg**
7782-49-2	Selenium	4.72U	18.9	4.72	mg/kg
7440-22-4	Silver	1.18U	4.72	1.18	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:37	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 01:39	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.34J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.014J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
[illegible]	Lead	**5.40**	**0.50**	**0.019**	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Sampled Date/Time	Received Date/Time
[illegible]	[illegible]	Solid	[illegible]	[illegible]

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:03	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.58	0.014	0.0048	mg/kg

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:35	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	19.1	9.60	2.40	mg/kg
7440-39-3	Barium	370	4.80	1.20	mg/kg
7440-43-9	Cadmium	2.99	2.40	0.60	mg/kg
7440-47-3	Chromium	445	4.80	1.20	mg/kg
7439-92-1	Lead	3860	7.20	1.80	mg/kg
7782-49-2	Selenium	5.02J	19.2	4.80	mg/kg
7440-22-4	Silver	23.4	4.80	1.20	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]14	ST-S1 (A) (TCLP)	Solid	05/08/2013 15:15	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:39	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 01:47	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.99J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.032J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**4.37**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756-15	SC-51 (4)	Solid	05/08/2013 15:16	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:08	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.54	0.014	0.0047	mg/kg

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:43	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	17.2	9.62	2.41	mg/kg
7440-39-3	Barium	344	4.81	1.20	mg/kg
7440-43-9	Cadmium	2.40J	2.41	0.60	mg/kg
7440-47-3	Chromium	376	4.81	1.20	mg/kg
7439-92-1	Lead	4920	7.22	1.80	mg/kg
7782-49-2	Selenium	4.81U	19.2	4.81	mg/kg
7440-22-4	Silver	24.6	4.81	1.20	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S1 (1) (JCLP)	Solid	05/06/2013 15:16	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:44	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 01:54	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.85J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.026J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**2.74**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:14	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.67	0.014	0.0046	mg/kg

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:50	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	21.5	9.57	2.39	mg/kg
7440-39-3	Barium	302	4.79	1.20	mg/kg
7440-43-9	Cadmium	2.52	2.39	0.60	mg/kg
7440-47-3	Chromium	353	4.79	1.20	mg/kg
7439-92-1	Lead	3720	7.18	1.79	mg/kg
7782-49-2	Selenium	5.11J	19.1	4.79	mg/kg
7440-22-4	Silver	18.5	4.79	1.20	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	St-S1 (E) (TCLP)	Solid	05/06/2013 15:17	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:46	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:02	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.23J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	S1-52 (A)	Solid	05/06/2013 14:20	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:16	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.11**	**0.013**	**0.0042**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 12:58	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**20.8**	**9.16**	**2.29**	**mg/kg**
7440-39-3	**Barium**	**144**	**4.58**	**1.14**	**mg/kg**
7440-43-9	Cadmium	0.57U	2.29	0.57	mg/kg
7440-47-3	**Chromium**	**46.1**	**4.58**	**1.14**	**mg/kg**
7439-92-1	**Lead**	**1830**	**6.87**	**1.72**	**mg/kg**
7782-49-2	Selenium	4.58U	18.3	4.58	mg/kg
7440-22-4	Silver	1.14U	4.58	1.14	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756002	ST-52 (A) (TCLP)	Solid	05/06/2013 16:20	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:48	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:10	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.32J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.013J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**6.43**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-S2 (B)	Solid	05/06/2013 15:21	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:18	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.13**	**0.013**	**0.0042**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 13:04	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**21.2**	**9.25**	**2.31**	**mg/kg**
7440-39-3	**Barium**	**132**	**4.62**	**1.16**	**mg/kg**
7440-43-9	Cadmium	0.58U	2.31	0.58	mg/kg
7440-47-3	**Chromium**	**56.0**	**4.62**	**1.16**	**mg/kg**
7439-92-1	**Lead**	**2820**	**6.93**	**1.73**	**mg/kg**
7782-49-2	Selenium	4.62U	18.5	4.62	mg/kg
7440-22-4	Silver	1.16U	4.62	1.16	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756-22	ST-S2 (B) (HCLP)	Solid	05/06/2013 15:21	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:49	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:18	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.50J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.013J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**7.83**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-SE (Q)	Solid	05/06/2013 [illegible]	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:20	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.19**	**0.013**	**0.0042**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 13:10	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**18.6**	**9.16**	**2.29**	**mg/kg**
7440-39-3	**Barium**	**143**	**4.58**	**1.15**	**mg/kg**
7440-43-9	Cadmium	0.57U	2.29	0.57	mg/kg
7440-47-3	**Chromium**	**59.3**	**4.58**	**1.15**	**mg/kg**
7439-92-1	**Lead**	**2450**	**6.87**	**1.72**	**mg/kg**
7782-49-2	Selenium	4.58U	18.3	4.58	mg/kg
7440-22-4	Silver	1.15U	4.58	1.15	mg/kg

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756-24	ST-S2 (E) (TCLP)	Solid	05/06/2013 15:22	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:51	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:25	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.48J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.019J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**8.77**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756-5	37-33 (A)	Solid	05/06/2013 16:00	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:21	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.34**	**0.012**	**0.0040**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 13:17	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**5.80J**	**8.69**	**2.17**	**mg/kg**
7440-39-3	**Barium**	**682**	**4.35**	**1.09**	**mg/kg**
7440-43-9	**Cadmium**	**7.16**	**2.17**	**0.54**	**mg/kg**
7440-47-3	**Chromium**	**1120**	**4.35**	**1.09**	**mg/kg**
7439-92-1	**Lead**	**33500**	**6.52**	**1.63**	**mg/kg**
7782-49-2	Selenium	4.35U	17.4	4.35	mg/kg
7440-22-4	**Silver**	**1.14J**	**4.35**	**1.09**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756-20	ST-S3 (A) (TCLP)	Solid	05/06/2013 10:00	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:53	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:33	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.01J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**3.28**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**1.09**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-[illegible] (B)	Solid	05/08/2013 16:01	05/07/2013 09:20

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:23	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.28**	**0.013**	**0.0044**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 13:24	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**7.17J**	**8.97**	**2.24**	**mg/kg**
7440-39-3	**Barium**	**578**	**4.49**	**1.12**	**mg/kg**
7440-43-9	**Cadmium**	**9.88**	**2.24**	**0.56**	**mg/kg**
7440-47-3	**Chromium**	**1310**	**4.49**	**1.12**	**mg/kg**
7439-92-1	**Lead**	**36200**	**6.73**	**1.68**	**mg/kg**
7782-49-2	Selenium	4.49U	17.9	4.49	mg/kg
7440-22-4	**Silver**	**1.12J**	**4.49**	**1.12**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756[illegible]	ST-83 (B) (TCLP)	Solid	05/06/2013 16:01	05/07/2013 09:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:55	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:41	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.75J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.022J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.66**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
[illegible]	[illegible]	Solid	[illegible]	[illegible]

SW-846 7471B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 13:00	506880	SW-846 7471B	1	05/15/2013 18:25	BAM	506955

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.12**	**0.013**	**0.0042**	**mg/kg**

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/08/2013 11:00	506879	SW-846 3050B	10	05/09/2013 14:07	BAM	506966

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	**Arsenic**	**8.98**	**8.83**	**2.21**	**mg/kg**
7440-39-3	**Barium**	**703**	**4.41**	**1.10**	**mg/kg**
7440-43-9	**Cadmium**	**12.2**	**2.21**	**0.55**	**mg/kg**
7440-47-3	**Chromium**	**1650**	**4.41**	**1.10**	**mg/kg**
7439-92-1	**Lead**	**42500**	**6.62**	**1.66**	**mg/kg**
7782-49-2	Selenium	4.41U	17.7	4.41	mg/kg
7440-22-4	**Silver**	**1.29J**	**4.41**	**1.10**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213050756030	SIT-S3 (6) (TCLP)	Solid	05/06/2013 10:02	05/07/2013 00:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:30	506979	SW-846 7470A	1	05/09/2013 15:57	CLB2	507007

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/09/2013 12:45	506980	SW-846 3010A	5	05/10/2013 02:48	BAM	507033

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.68J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.016J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.34J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A DRY WEIGHT BASIS

Inorganics Quality Control Summary

Analytical Batch	506955	**Client ID**	MB506880			LCS506880		
Prep Batch	506880	**GCAL ID**	1189641			1189642		
Prep Method	SW-846 7471B	**Sample Type**	Method Blank			LCS		
		Prep Date	05/08/2013 13:00			05/08/2013 13:00		
		Analytical Date	05/15/2013 17:40			05/15/2013 17:41		
		Matrix	Solid			Solid		
SW-846 7471B		**Units**	**Result**	mg/kg **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7439-97-6	Mercury		0.0033U	0.0033	0.25	0.21	84	80 - 120

Analytical Batch	506955	**Client ID**	ST-N2 (B)			1189556MS			1189556MSD			
Prep Batch	506880	**GCAL ID**	21305075610			1189643			1189644			
Prep Method	SW-846 7471B	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	05/08/2013 13:00			05/08/2013 13:00			05/08/2013 13:00			
		Analytical Date	05/15/2013 17:47			05/15/2013 17:48			05/15/2013 17:50			
		Matrix	Solid			Solid			Solid			
SW-846 7471B		**Units**	**Result**	mg/kg **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7439-97-6	Mercury		0.10	0.0033	0.25	0.40	**121***	80 - 120	0.40	119	0.0	20

Inorganics Quality Control Summary

Analytical Batch	506966	**Client ID**	MB506879	LCS506879
Prep Batch	506879	**GCAL ID**	1189637	1189638
Prep Method	SW-846	**Sample Type**	Method Blank	LCS
	3050B	**Prep Date**	05/08/2013 11:00	05/08/2013 11:00
		Analytical Date	05/09/2013 10:57	05/09/2013 11:05
		Matrix	Solid	Solid

SW-846 6010C		**Units**	mg/kg				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-38-2	Arsenic	0.20U	0.20	20.0	20.3	101	80 - 120
7440-39-3	Barium	0.10U	0.10	20.0	20.4	102	80 - 120
7440-43-9	Cadmium	0.050U	0.050	20.0	20.2	101	80 - 120
7440-47-3	Chromium	0.10U	0.10	20.0	20.6	103	80 - 120
7439-92-1	Lead	0.28J	0.15	20.0	20.7	103	80 - 120
7782-49-2	Selenium	0.40U	0.40	20.0	20.0	100	80 - 120
7440-22-4	Silver	0.10U	0.10	20.0	20.0	100	80 - 120

Analytical Batch	506966	**Client ID**	ST-N2 (B)	1189556MS	1189556MSD
Prep Batch	506879	**GCAL ID**	21305075610	1189639	1189640
Prep Method	SW-846	**Sample Type**	SAMPLE	MS	MSD
	3050B	**Prep Date**	05/08/2013 11:00	05/08/2013 11:00	05/08/2013 11:00
		Analytical Date	05/09/2013 11:12	05/09/2013 11:18	05/09/2013 11:25
		Matrix	Solid	Solid	Solid

SW-846 6010C		**Units**	mg/kg								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-38-2	Arsenic	18.8	2.00	20.0	39.1	102	80 - 120	41.0	111	5	20
7440-39-3	Barium	159	1.00	20.0	337	**887***	80 - 120	228	**343***	**39***	20
7440-43-9	Cadmium	0.90	0.50	20.0	19.5	93	80 - 120	20.7	99	6	20
7440-47-3	Chromium	53.8	1.00	20.0	81.5	**139***	80 - 120	429	**1880***	**136***	20
7439-92-1	Lead	1370	1.50	20.0	1290	**-413***	80 - 120	1880	**2550***	**37***	20
7782-49-2	Selenium	6.47	4.00	20.0	22.9	82	80 - 120	22.2	**78***	3	20
7440-22-4	Silver	1.36	1.00	20.0	20.0	93	80 - 120	20.4	95	2	20

Inorganics Quality Control Summary

Analytical Batch	507007	**Client ID**	MB506979			LCS506979		
Prep Batch	506979	**GCAL ID**	1190135			1190136		
Prep Method	SW-846 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	05/09/2013 12:30			05/09/2013 12:30		
		Analytical Date	05/09/2013 15:05			05/09/2013 15:07		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.000068U	0.000068	0.0050	0.0056	112	80 - 120

Analytical Batch	507007	**Client ID**	TCLP-2			1189504MS		
Prep Batch	506979	**GCAL ID**	21305070817			1190137		
Prep Method	SW-846 7470A	**Sample Type**	SAMPLE			MS		
		Prep Date	05/09/2013 12:30			05/09/2013 12:30		
		Analytical Date	05/09/2013 15:16			05/09/2013 15:18		
		Matrix	Solid			Solid		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.0	0.000068	0.0050	0.0057	115	75 - 125

Analytical Batch	507007	**Client ID**	OILY RAGS 050713			1189501MS		
Prep Batch	506979	**GCAL ID**	21305074801			1190138		
Prep Method	SW-846 7470A	**Sample Type**	SAMPLE			MS		
		Prep Date	05/09/2013 12:30			05/09/2013 12:30		
		Analytical Date	05/09/2013 15:23			05/09/2013 15:25		
		Matrix	Solid			Solid		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.0	0.000068	0.0050	0.0059	118	75 - 125

Inorganics Quality Control Summary

Analytical Batch 507007	**Client ID**	TANK #5923 INTERIOR	1189689MS	1189689MSD
Prep Batch 506979	**GCAL ID**	21305080501	1190259	1190260
Prep Method SW-846	**Sample Type**	SAMPLE	MS	MSD
7470A	**Prep Date**	05/09/2013 12:30	05/09/2013 12:30	05/09/2013 12:30
	Analytical Date	05/09/2013 15:09	05/09/2013 15:11	05/09/2013 15:12
	Matrix	Solid	Solid	Solid

SW-846 1311/7470A		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**RPD Limit**
7439-97-6	Mercury	0.0	0.000068	0.0050	0.0061	123	75 - 125	0.0060	120	2	20

Inorganics Quality Control Summary

Analytical Batch	507033	**Client ID**	MB506980	LCS506980
Prep Batch	506980	**GCAL ID**	1190141	1190142
Prep Method	SW-846 3010A	**Sample Type**	Method Blank	LCS
		Prep Date	05/09/2013 12:45	05/09/2013 12:45
		Analytical Date	05/09/2013 23:07	05/09/2013 23:15
		Matrix	Water	Water

SW-846 1311/6010C		**Units**	mg/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.51	101	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.50	100	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.50	100	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.50	99	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.50	101	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.51	102	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.48	97	80 - 120

Analytical Batch	507033	**Client ID**	TANK #5923 INTERIOR	1189689MS	1189689MSD
Prep Batch	506980	**GCAL ID**	21305080501	1190143	1190144
Prep Method	SW-846 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	05/09/2013 12:45	05/09/2013 12:45	05/09/2013 12:45
		Analytical Date	05/09/2013 23:21	05/09/2013 23:29	05/09/2013 23:37
		Matrix	Solid	Solid	Solid

SW-846 1311/6010C		**Units**	mg/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-38-2	Arsenic	0.017	0.025	0.50	0.56	108	75 - 125	0.56	108	0	20
7440-39-3	Barium	0.57	0.013	0.50	1.05	97	75 - 125	1.09	104	4	20
7440-43-9	Cadmium	0.0040	0.0063	0.50	0.55	109	75 - 125	0.56	110	2	20
7440-47-3	Chromium	0.037	0.013	0.50	0.54	102	75 - 125	0.56	104	4	20
7439-92-1	Lead	0.051	0.019	0.50	0.60	109	75 - 125	0.59	108	2	20
7782-49-2	Selenium	0.020	0.050	0.50	0.57	110	75 - 125	0.57	110	0	20
7440-22-4	Silver	0.0	0.013	0.50	0.49	99	75 - 125	0.49	99	0	20

Inorganics Quality Control Summary

Analytical Batch	507033	**Client ID**	TCLP-2	1189504MS
Prep Batch	506980	**GCAL ID**	21305070817	1190146
Prep Method	SW-846	**Sample Type**	SAMPLE	MS
	3010A	**Prep Date**	05/09/2013 12:45	05/09/2013 12:45
		Analytical Date	05/10/2013 00:14	05/10/2013 00:21
		Matrix	Solid	Solid

SW-846 1311/6010C		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-38-2	Arsenic	0.0	0.025	0.50	0.53	106	75 - 125
7440-39-3	Barium	0.16	0.013	0.50	0.66	99	75 - 125
7440-43-9	Cadmium	0.0014	0.0063	0.50	0.51	103	75 - 125
7440-47-3	Chromium	0.0056	0.013	0.50	0.50	100	75 - 125
7439-92-1	Lead	0.0	0.019	0.50	0.52	103	75 - 125
7782-49-2	Selenium	0.016	0.050	0.50	0.55	107	75 - 125
7440-22-4	Silver	0.0	0.013	0.50	0.49	98	75 - 125

GCAL

TCLP EXTRACTIONS

ANALYST: GPA/JRA
DATE: 5/8/13

HBN: 506872
BATCH: 7895

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 20.1
Max. Temp °C: 23.3

Sample Number:		21305075602	21305075604	21305075606	21305075608
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A	N/A
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)				
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96	96	96	96
Initial pH (After 5 min. mixing)	"pH-1"	8.48	8.60	8.47	8.65
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	1.60	1.63	1.51	1.70
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)				
Weight of Solids to be Extracted	(X)	100.2	100.1	100.4	100.3
Filtrate Vessel Weight (multiphasic)	(EV)				
Weight of Filtrate + Vessel (multiphasic)	(EF)				
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		1400/800	1400/800	1400/800	1400/800
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:					
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)					
pH of TCLP Extract (If two phase record pH for each phase)		6.11	5.13	5.44	5.69

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-38-3 4.93 Rotator ID: 2,4,5,6
Ext. Fluid #2 pH/ID: GPA SAM 553-1-1 3.08 Rotation Start Date: 5/8/13
Balance ID: 1117331005 Rotation Stop Date: 5/9/13

Revision 004: 10/19/2012

Reviewer/Date: RJO 5/15/13

GCAL

TCLP EXTRACTIONS

ANALYST: GPA / JRA
DATE: 5/8/13

HBN: 506872
BATCH: 7895

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 20.1
Max. Temp °C: 23.3

Sample Number:		21305075609	21305075612	21305075614	21305075616
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		NA	NA	NA	NA
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2. EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)				
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96	96	96	96
Initial pH (After 5 min. mixing)	"pH-1"	8.87	8.86	8.08	8.13
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	1.74	1.44	2.08	2.20
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)				
Weight of Solids to be Extracted	(X)	100.2	100.1	100.2	100.1
Filtrate Vessel Weight (multiphasic)	(EV)				
Weight of Filtrate + Vessel (multiphasic)	(EF)				
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		1400/800	1400/800	1400/800	1400/800
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:					
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)					
pH of TCLP Extract (If two phase, record pH for each phase)		6.39	6.25	5.41	5.52

*If sample is <0.5 %S or <0.5 %DS, Filter sample, collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-38-3 4.93
Ext. Fluid #2 pH/ID: 552-1-1 3.08
Balance ID: 2H733005
ES-515-07-004 10/19/2012

Rotator ID: 2,4,5,6
Rotation Start Date: 5/8/13
Rotation Stop Date: 5/9/13

Reviewer/Date: RSD 5/15/13 94

GCAL

TCLP EXTRACTIONS

ANALYST: GPA / JRA
DATE: 5/8/13

HBN: 506872
BATCH: 7895

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 20.1
Max. Temp °C: 23.3

Sample Number:	21305075618	21305075620	21305075622	21305075624
Sample Description	Dirt	Dirt	Dirt	Dirt
Matrix Spike Required	N/A	N/A	N/A	N/A
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)				
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)	96	96	96	96
Initial pH (After 5 min. mixing) "pH-1"	7.99	8.24	8.36	8.17
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	2.05	2.60	2.31	2.08
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11 (√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)				
Weight of Solids to be Extracted (X)	100.0	100.0	100.0	100.0
Filtrate Vessel Weight (multiphasic) (EV)				
Weight of Filtrate + Vessel (multiphasic) (EF)				
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	1400/800	1400/800	1400/800	1400/800
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:				
Volume Extract obtained in Step 5 (EF-EV)	500	500	500	500
Volume filtrate from Step 4 (L)				
pH of TCLP Extract (If two phase,record pH for each phase)	5.63	5.93	5.21	5.43

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-38-3 4.93
Ext. Fluid #2 pH/ID: 553-1-1 3.08
Balance ID: 1103331005

Rotator ID: 2,4,5,6
Rotation Start Date: 5/8/13
Rotation Stop Date: 5/9/13

Revision 004: 10/19/2012

Reviewer/Date: RJD 5/15/13

GCAL

TCLP EXTRACTIONS

ANALYST: GRA / JRA
DATE: 5/8/13

HBN: 506 872
BATCH: 7895

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 20.1
Max. Temp °C: 23.3

Sample Number:		21305075626	21305075628	21305075630	21305074801
Sample Description		Dirt	Dirt	Dirt	Oily Rags
Matrix Spike Required		N/A	N/A	N/A	NS
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)				
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96	96	96	96
Initial pH (After 5 min. mixing)	"pH-1"	10.12	10.11	9.95	7.38
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	6.05	4.65	3.63	1.22
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	N/A	✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)	✓	N/A	N/A	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)				
Weight of Solids to be Extracted	(X)	100.0	100.0	100.0	100.0
Filtrate Vessel Weight (multiphasic)	(EV)				
Weight of Filtrate + Vessel (multiphasic)	(EF)				
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		1400/800	1400/800	1400/800	1400/800
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:					
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)					
pH of TCLP Extract (If two phase,record pH for each phase)		8.12	6.02	6.63	5.59

*If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-38-3 4.93
Ext. Fluid #2 pH/ID: 553-1-1 3.08
Balance ID: 111733/005
Revision 004: 10/19/2012

Rotator ID: 2,4,5,6
Rotation Start Date: 5/8/13
Rotation Stop Date: 5/9/13

Reviewer/Date: PTD 5/15/13 [illegible]

GCAL

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

Chain of Custody Record

Lab use only

Client Name	Client #	Workorder #	Due Date
Kemron	4794	213050756	5/10/13

Report to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd
Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Bill to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd.
Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Lab use only:
Custody Seal
used ☒ yes ☐ no
intact ☒ yes ☐ no
Temperature °C 3.3 EZZ

P.O. Number: SH0482
Project Name/Number: Trinity North & South / SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Total RCRA Metals 6010/7470	TCLP RCRA Metals 1311/6010/7470	TCLP Leachate pH 9045	Remarks:	Lab ID
S	5/6/13	1445		X	ST-N1 (A)	None	1	X	X	X		1,2
		1446		X	ST-N1 (B)			X	X	X		3,4
		1447		X	ST-N1 (C)			X	X	X		5,6
		1450		X	ST-N2 (A)			X	X	X		7,8
		1451		X	ST-N2 (B)			X	X	X		9,10
		1452		X	ST-N2 (C)			X	X	X		11,12
		1515		X	ST-S1 (A)			X	X	X		13,14
		1516		X	ST-S1 (B)			X	X	X		15,16
		1517		X	ST-S1 (C)			X	X	X		17,19
		1520		X	ST-S2 (A)			X	X	X		19,20
		1521		X	ST-S2 (B)			X	X	X		21,2
		1522		X	ST-S2 (C)			X	X	X		23,24
		1600		X	ST-S3 (A)			X	X	X		25,2
		1601		X	ST-S3 (B)			X	X	X		27,2

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☒ Other 4 DAY TAT Due 5-13-13

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Tomecia Riley		5/6/13	1630
Fed Ex	Chauncey	5/7/13	920

Note:

GOAL

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Due Date
Kemron	4794	2130507560	5/10/13

Report to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd
Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Bill to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd
Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Lab use only:
Custody Seal
used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 3.3

P.O. Number: SH0482
Project Name/Number: Trinity North & South / SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Total RCRA Metals 6010/7470	TCLP RCRA Metals 13[illegible]/6010/7470	TCLP Leachate pH 9045	Remarks:	Lab ID
S	5/6/13	1602		X	ST-S3 (C)	None	1	X	X	X		29,3[illegible]

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☒ Other 4 DAY TAT Due 5-13-13

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Tomecia Riley		5/6/13	1630
Fed Ex	Claucier	5/7/13	920

Note: 7996 9402 5384

2 of 2

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

213050756

SAMPLE DELIVERY GROUP	213050756
Client 4794 - KEMRON	**Transport Method** FEDEX
Profile Number 242849	**Received By** Saucier, Charlotte
Line Item(s) 1 - RCRA Metals Soil	**Receive Date(s)** 05/07/13

CHECKLIST			
Were all samples received using proper thermal preservation?	☑ Yes	☐ No	☐ NA
When used, were all custody seals intact?	☑ Yes	☐ No	☐ NA
Were all samples received in proper containers?	☑ Yes	☐ No	☐ NA
Were all samples received using proper chemical preservation?	☑ Yes	☐ No	☐ NA
Was preservative added to any container at the lab?	☐ Yes	☑ No	☐ NA
Were all containers received in good condition?	☑ Yes	☐ No	☐ NA
Were all VOA vials received with no head space?	☐ Yes	☐ No	☑ NA
Do all sample labels match the Chain of Custody?	☑ Yes	☐ No	☐ NA
Did the Chain of Custody list the sampling technician?	☑ Yes	☐ No	☐ NA
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑ Yes	☐ No	☐ NA

COOLERS

Airbill	Temp(oC)
7996 9402 5384	3.3

DISCREPANCIES

None

LABORATORY PRESERVATIONS

None

NOTES

APPENDIX B

MIXTURE DESIGN SHEETS

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-001
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-002
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-003
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-004
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-005
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-006
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-007
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-008
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-009
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-010
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No:	
PROJECT No.:	SH0482		0482-011
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-012
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-013
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-014
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-015
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-016
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-017
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-018
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-019
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-020
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-021
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-022
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-023
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-024
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-025
PROJECT No.:	SH0482		
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-026
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-027
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-028
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-029
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-030
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-031
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-032
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-033
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-034
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-035
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-036
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-037
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-038
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	5.00 %	10.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-039
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	7.00 %	14.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-040
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-041
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-042
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 93 HR	8.00 %	16.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-043
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-044
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	6.00 %	12.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-045
MIXING DATE:	29-May-12	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Free Flow FF200	8.00 %	16.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

APPENDIX C

TREATED ANALYTICAL RESULTS

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 06/05/2013

GCAL Report 213053020

Deliver To	KEMRON 1359A Ellsworth Industrial Blv Atlanta, GA 30318 404-601-6927
Attn	Tommy Jordan

Project Trinity North & South / SH0482

CASE NARRATIVE

Client: KEMRON **Report:** 213053020

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

METALS

In the SW-846 1311/6010C analysis, a chemical or physical interference necessitated a dilution for all samples. This is reflected in the elevated reporting limits.

In the SW-846 1311/6010C analysis for prep batch 508448, the MS recovery is not applicable for Lead because the sample concentration is greater than four times the spike concentration.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature

GCAL REPORT 213053020

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302001	0482-001	Solid	05/29/2013 10:05	05/30/2013 10:30
21305302002	0482-002	Solid	05/29/2013 10:10	05/30/2013 10:30
21305302003	0482-003	Solid	05/29/2013 10:20	05/30/2013 10:30
21305302004	0482-004	Solid	05/29/2013 10:30	05/30/2013 10:30
21305302005	0482-005	Solid	05/29/2013 10:35	05/30/2013 10:30
21305302006	0482-006	Solid	05/29/2013 10:40	05/30/2013 10:30
21305302007	0482-007	Solid	05/29/2013 10:50	05/30/2013 10:30
21305302008	0482-008	Solid	05/29/2013 10:55	05/30/2013 10:30
21305302009	0482-009	Solid	05/29/2013 10:56	05/30/2013 10:30
21305302010	0482-010	Solid	05/29/2013 11:05	05/30/2013 10:30
21305302011	0482-011	Solid	05/29/2013 11:10	05/30/2013 10:30
21305302012	0482-012	Solid	05/29/2013 11:15	05/30/2013 10:30
21305302013	0482-013	Solid	05/29/2013 11:20	05/30/2013 10:30
21305302014	0482-014	Solid	05/29/2013 11:30	05/30/2013 10:30
21305302015	0482-015	Solid	05/29/2013 11:32	05/30/2013 10:30
21305302016	0482-016	Solid	05/29/2013 11:35	05/30/2013 10:30
21305302017	0482-017	Solid	05/29/2013 11:43	05/30/2013 10:30
21305302018	0482-018	Solid	05/29/2013 11:45	05/30/2013 10:30
21305302019	0482-019	Solid	05/29/2013 12:30	05/30/2013 10:30
21305302020	0482-020	Solid	05/29/2013 12:34	05/30/2013 10:30
21305302021	0482-021	Solid	05/29/2013 12:36	05/30/2013 10:30
21305302022	0482-022	Solid	05/29/2013 13:04	05/30/2013 10:30
21305302023	0482-023	Solid	05/29/2013 13:11	05/30/2013 10:30
21305302024	0482-024	Solid	05/29/2013 13:15	05/30/2013 10:30
21305302025	0482-025	Solid	05/29/2013 13:23	05/30/2013 10:30
21305302026	0482-026	Solid	05/29/2013 13:25	05/30/2013 10:30
21305302027	0482-027	Solid	05/29/2013 13:28	05/30/2013 10:30
21305302028	0482-028	Solid	05/29/2013 13:35	05/30/2013 10:30
21305302029	0482-029	Solid	05/29/2013 13:38	05/30/2013 10:30
21305302030	0482-030	Solid	05/29/2013 13:44	05/30/2013 10:30
21305302031	0482-031	Solid	05/29/2013 13:52	05/30/2013 10:30
21305302032	0482-032	Solid	05/29/2013 13:54	05/30/2013 10:30
21305302033	0482-033	Solid	05/29/2013 13:57	05/30/2013 10:30
21305302034	0482-034	Solid	05/29/2013 14:03	05/30/2013 10:30
21305302035	0482-035	Solid	05/29/2013 14:05	05/30/2013 10:30
21305302036	0482-036	Solid	05/29/2013 14:10	05/30/2013 10:30
21305302037	0482-037	Solid	05/29/2013 14:24	05/30/2013 10:30
21305302038	0482-038	Solid	05/29/2013 14:28	05/30/2013 10:30
21305302039	0482-039	Solid	05/29/2013 14:31	05/30/2013 10:30
21305302040	0482-040	Solid	05/29/2013 14:40	05/30/2013 10:30
21305302041	0482-041	Solid	05/29/2013 14:43	05/30/2013 10:30
21305302042	0482-042	Solid	05/29/2013 14:47	05/30/2013 10:30
21305302043	0482-043	Solid	05/29/2013 14:51	05/30/2013 10:30
21305302044	0482-044	Solid	05/29/2013 14:55	05/30/2013 10:30
21305302045	0482-045	Solid	05/29/2013 14:57	05/30/2013 10:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020001	0482-001	Solid	05/29/2013 10:05	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.39J	5.00	0.013	mg/L
7439-92-1	Lead	0.23J	0.50	0.019	mg/L
7440-22-4	Silver	0.036J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020002	0482-002	Solid	05/29/2013 10:10	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.039J	5.00	0.013	mg/L
7440-22-4	Silver	0.035J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020003	0482-003	Solid	05/29/2013 10:20	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.040J	5.00	0.013	mg/L
7440-22-4	Silver	0.036J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020004	0482-004	Solid	05/29/2013 10:30	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.25J	5.00	0.013	mg/L
7440-22-4	Silver	0.037J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020005	0482-005	Solid	05/29/2013 10:35	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.26J	5.00	0.013	mg/L
7440-22-4	Silver	0.036J	0.25	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302006	0482-006	Solid	05/29/2013 10:40	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.34J	5.00	0.013	mg/L
7440-47-3	Chromium	0.032J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302007	0482-007	Solid	05/29/2013 10:50	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.24J	5.00	0.013	mg/L
7439-92-1	Lead	4.24	0.50	0.019	mg/L
7440-22-4	Silver	0.036J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302008	0482-008	Solid	05/29/2013 10:55	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.19J	5.00	0.013	mg/L
7439-92-1	Lead	0.55	0.50	0.019	mg/L
7440-22-4	Silver	0.036J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302009	0482-009	Solid	05/29/2013 10:58	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.11J	5.00	0.013	mg/L
7440-22-4	Silver	0.034J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302010	0482-010	Solid	05/29/2013 11:05	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.48J	5.00	0.013	mg/L
7439-92-1	Lead	0.21J	0.50	0.019	mg/L
7440-22-4	Silver	0.039J	0.25	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020011	0492-011	Solid	05/29/2013 11:10	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.12J	5.00	0.013	mg/L
7440-22-4	Silver	0.041J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020012	0492-012	Solid	05/29/2013 11:18	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.063J	5.00	0.013	mg/L
7440-22-4	Silver	0.037J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020013	0492-013	Solid	05/29/2013 11:28	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.50J	5.00	0.013	mg/L
7440-22-4	Silver	0.040J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020014	0492-014	Solid	05/29/2013 11:36	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.84J	5.00	0.013	mg/L
7440-22-4	Silver	0.039J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020015	0492-015	Solid	05/29/2013 11:42	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.70J	5.00	0.013	mg/L
7440-47-3	Chromium	0.042J	0.25	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302016	0482-016	Solid	05/29/2013 11:35	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.96J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.013J	0.050	0.0063	mg/L
7440-47-3	Chromium	0.016J	0.25	0.013	mg/L
7439-92-1	Lead	6.65	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302017	0482-017	Solid	05/29/2013 11:43	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.48J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.0074J	0.050	0.0063	mg/L
7439-92-1	Lead	1.17	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302018	0482-018	Solid	05/29/2013 11:46	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.28J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.019J	0.050	0.0063	mg/L
7440-47-3	Chromium	0.14J	0.25	0.013	mg/L
7439-92-1	Lead	10.7	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302019	0482-019	Solid	05/29/2013 12:30	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.27J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.017J	0.050	0.0063	mg/L
7439-92-1	Lead	0.32J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302020	0482-020	Solid	05/29/2013 12:34	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.12J	5.00	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-21	0182-021	Solid	05/29/2013 12:00	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.92J	5.00	0.013	mg/L
7440-47-3	Chromium	0.020J	0.25	0.013	mg/L
7439-92-1	Lead	0.69	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-22	0182-022	Solid	05/29/2013 13:00	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	2.63J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.060	0.050	0.0063	mg/L
7440-47-3	Chromium	0.17J	0.25	0.013	mg/L
7439-92-1	Lead	8.64	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-23	0182-023	Solid	05/29/2013 13:11	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	2.12J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.025J	0.050	0.0063	mg/L
7439-92-1	Lead	3.27	0.50	0.019	mg/L
7782-49-2	Selenium	0.054J	0.50	0.050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-24	0182-024	Solid	05/29/2013 13:15	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.23J	5.00	0.013	mg/L
7440-47-3	Chromium	0.033J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-25	0182-025	Solid	05/29/2013 13:20	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.25J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.033J	0.050	0.0063	mg/L
7439-92-1	Lead	2.77	0.50	0.019	mg/L
7440-22-4	Silver	0.041J	0.25	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020026	0482-026	Solid	05/29/2013 13:25	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00015J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.19J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.022J	0.050	0.0063	mg/L
7439-92-1	Lead	0.79	0.50	0.019	mg/L
7440-22-4	Silver	0.039J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020027	0484-027	Solid	05/29/2013 13:20	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.17J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.012J	0.050	0.0063	mg/L
7439-92-1	Lead	0.11J	0.50	0.019	mg/L
7782-49-2	Selenium	0.051J	0.50	0.050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020028	0482-028	Solid	05/29/2013 13:35	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.64J	5.00	0.013	mg/L
7439-92-1	Lead	0.15J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020029	0482-029	Solid	05/29/2013 13:35	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.12J	5.00	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	[illegible]	Solid	05/29/2013 13:44	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00016J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.13J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.0088J	0.050	0.0063	mg/L
7439-92-1	Lead	2.51	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	[illegible]	Solid	05/29/2013 13:52	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00050J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.82J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.015J	0.050	0.0063	mg/L
7440-47-3	Chromium	0.017J	0.25	0.013	mg/L
7439-92-1	Lead	18.3	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	[illegible]	Solid	05/29/2013 13:54	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.56J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.0077J	0.050	0.0063	mg/L
7439-92-1	Lead	4.02	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	[illegible]	Solid	05/29/2013 13:57	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.52J	5.00	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020034	0482-034	Solid	05/29/2013 14:03	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00028J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.44J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.012J	0.050	0.0063	mg/L
7439-92-1	Lead	2.78	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020035	0482-035	Solid	05/29/2013 14:05	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.40J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.019J	0.050	0.0063	mg/L
7440-47-3	Chromium	0.038J	0.25	0.013	mg/L
7439-92-1	Lead	20.4	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020036	0482-036	Solid	05/29/2013 14:10	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.41J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.018J	0.050	0.0063	mg/L
7440-47-3	Chromium	0.042J	0.25	0.013	mg/L
7439-92-1	Lead	19.2	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020037	0482-037	Solid	05/29/2013 14:24	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.58J	5.00	0.013	mg/L
7440-47-3	Chromium	0.73	0.25	0.013	mg/L
7439-92-1	Lead	0.48J	0.50	0.019	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0182-03[illegible]	Solid	05/29/2013 14:[illegible]	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.49J	5.00	0.013	mg/L
7440-47-3	Chromium	0.16J	0.25	0.013	mg/L
7439-92-1	Lead	0.28J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0182-03[illegible]	Solid	05/29/2013 14:3[illegible]	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.38J	5.00	0.013	mg/L
7440-47-3	Chromium	0.027J	0.25	0.013	mg/L
7439-92-1	Lead	0.21J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0182-04[illegible]	Solid	05/29/2013 14:40	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00011J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.68J	5.00	0.013	mg/L
7440-47-3	Chromium	0.023J	0.25	0.013	mg/L
7439-92-1	Lead	0.42J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0182-04[illegible]	Solid	05/29/2013 14:4[illegible]	05/30/2013 10:30

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.71J	5.00	0.013	mg/L
7440-47-3	Chromium	1.29	0.25	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020042	0482-042	Solid	05/29/2013 14:47	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000084J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.91J	5.00	0.013	mg/L
7440-47-3	Chromium	2.99	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020043	0482-043	Solid	05/29/2013 14:51	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.56J	5.00	0.013	mg/L
7440-47-3	Chromium	8.59	0.25	0.013	mg/L
7439-92-1	Lead	1.01	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020044	0482-044	Solid	05/29/2013 14:55	05/30/2013 10:30

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00017J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.42J	5.00	0.013	mg/L
7440-47-3	Chromium	6.04	0.25	0.013	mg/L
7439-92-1	Lead	0.78	0.50	0.019	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	[illegible]	Solid	05/29/2013 14:57	05/30/2013 10:00

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00031J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.34J	5.00	0.013	mg/L
7440-47-3	Chromium	3.69	0.25	0.013	mg/L
7439-92-1	Lead	0.65	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-001	0402-001	Solid	05/29/2013 10:05	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:20	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 01:54	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.39J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.23J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.036J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	[illegible]	Solid	[illegible] 10:10	[illegible] 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:22	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:01	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.039J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.035J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020003	0402-003	Solid	05/29/2013 10:20	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:24	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:07	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.040J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.036J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0422-004	Solid	05/30/2013 10:00	05/30/2013 10:00

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:26	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:26	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.25J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.037J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305302005	0482-006	Solid	05/29/2013 10:35	05/31/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:27	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:33	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.26J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.036J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0482-006	Solid	05/29/2013 10:40	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:32	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 15:37	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.34J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.032J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020 07	0492-007	Solid	05/29/2013 10:50	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:29	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 01:41	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.24J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**4.24**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.036J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
[illegible]	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:33	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:39	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.19J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.55**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.036J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020009	0482-009	Solid	05/29/2013 10:58	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:38	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:46	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.11J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.034J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-10	0102-010	Solid	05/29/2013 11:05	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:40	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:52	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.48J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.21J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.039J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-11	0482-01[illegible]	Solid	05/29/2013 11:10	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:42	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 02:58	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.12J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.041J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-12	8492-512	Solid	05/20/2013 11:15	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:43	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 03:05	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.063J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.037J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-13	0482-013	Solid	05/29/2013 11:20	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:45	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 03:11	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.50J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.040J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
[illegible]	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:47	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 03:18	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.84J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.039J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-15	0492-015	Solid	05/29/2013 11:45	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:39	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Unit
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 16:13	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.70J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.042J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-10	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:41	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 16:34	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.96J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.013J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.016J**	**0.25**	**0.013**	**mg/L**
[redacted]	[redacted]	**6.65**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020/17	0482-017	Solid	06/29/2013 11:43	06/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:43	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 16:41	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.48J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.0074J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**1.17**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
[illegible]	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:44	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 16:49	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.28J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.019J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.14J**	**0.25**	**0.013**	**mg/L**
[redacted]	[redacted]	**10.7**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0402-019	Solid	05/29/2013 12:30	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:46	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 16:55	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.27J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.017J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.32J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	0482-020	Solid	06/29/2013 12:34	06/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:52	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 17:03	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.12J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	0492-024	Solid	05/29/2013 12:36	06/01/2013 10:40

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 10:00	508579	SW-846 7470A	1	06/03/2013 18:18	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 10:00	508586	SW-846 3010A	5	06/03/2013 21:05	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.92J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.020J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.69**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	[illegible]	Solid	05/2[illegible]/2013 [illegible]	05/30/2013 [illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:53	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 17:10	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**2.63J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.060**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.17J**	**0.25**	**0.013**	**mg/L**
[redacted]	[redacted]	**8.64**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0482-023	Solid	05/29/2013 13:11	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:55	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 17:17	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**2.12J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.025J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**3.27**	**0.50**	**0.019**	**mg/L**
7782-49-2	**Selenium**	**0.054J**	**0.50**	**0.050**	**mg/L**
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0282-025	Solid	05/20/2013 11:15	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:57	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 17:24	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.23J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.033J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0482-025	Solid	05/29/2013 13:25	06/01/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:49	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 03:24	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.25J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.033J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**2.77**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.041J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	0482-026	Solid	05/22/2013 13:25	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508449	SW-846 7470A	1	06/03/2013 18:51	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00015J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/31/2013 13:40	508448	SW-846 3010A	5	06/01/2013 03:44	BAM	508507

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.19J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.022J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.79**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	**Silver**	**0.039J**	**0.25**	**0.013**	**mg/L**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-27	0482-027	Solid	05/29/2013 13:20	04/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 15:59	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 17:30	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.17J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.012J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.11J**	**0.50**	**0.019**	**mg/L**
7782-49-2	**Selenium**	**0.051J**	**0.50**	**0.050**	**mg/L**
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:01	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 17:38	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.64J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.15J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	0482-020	Solid	05/29/2013 13:30	06/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:02	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:00	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.12J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-030	0482-030	Solid	05/20/2013 13:41	05/30/2013 10:00

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:04	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00016J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:08	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.13J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.0088J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**2.51**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:06	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00050J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:15	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.82J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.015J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.017J**	**0.25**	**0.013**	**mg/L**
[redacted]	[redacted]	**18.3**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-02	[illegible]	Solid	05/29/2013 13:54	05/30/2013 10:40

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:08	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:21	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.56J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.0077J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**4.02**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	0482-033	Solid	05/29/2013 13:57	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:14	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:28	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.52J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020NM	0482-034	Soil	05/29/2013 14:05	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:16	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00028J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:36	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.44J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.012J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**2.78**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:18	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:43	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.40J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.019J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.038J**	**0.25**	**0.013**	**mg/L**
[illegible]	[illegible]	**20.4**	**0.50**	**0.019**	[illegible]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0432 036	Solid	05/29/2013 14:10	05/30/2013 10:50

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 08:25	508578	SW-846 7470A	1	06/03/2013 16:20	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508577	SW-846 3010A	5	06/03/2013 18:49	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.41J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.018J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	**Chromium**	**0.042J**	**0.25**	**0.013**	**mg/L**
[redacted]	[redacted]	**19.2**	**0.50**	**0.019**	[redacted]
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-37	0482-037	Solid	05/29/2013 11:24	05/31/2013 10:38

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 16:50	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/03/2013 23:21	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.58J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.73**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.48J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0492.[illegible]	Solid	05/30/2013 14:20	05/30/2013 10:[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 16:52	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/03/2013 23:42	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.49J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.16J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.28J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020-039	3482-039	Soil	05/29/2013 14:31	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 16:57	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/03/2013 23:49	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.38J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.027J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.21J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 16:59	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00011J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/03/2013 23:56	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.68J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.023J**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.42J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0482-011	Solid	05/29/2013 14:43	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 17:01	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/04/2013 00:03	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.71J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**1.29**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 17:03	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.000084J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/04/2013 00:10	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.91J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**2.99**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 17:04	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00010J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/04/2013 00:17	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.56J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**8.59**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**1.01**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020[illegible]	0402-044	Solid	05/29/2013 [illegible]	05/30/2013 [illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 17:06	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00017J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/04/2013 00:24	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.42J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
[redacted]	[redacted]	**6.04**	**0.25**	**0.013**	[redacted]
7439-92-1	**Lead**	**0.78**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213053020045	0482-045	Solid	05/29/2013 14:57	05/30/2013 10:30

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:40	508501	SW-846 7470A	1	06/03/2013 17:08	BAM	508638

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.00031J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
06/02/2013 07:10	508502	SW-846 3010A	5	06/04/2013 00:31	BAM	508631

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.34J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**3.69**	**0.25**	**0.013**	**mg/L**
7439-92-1	**Lead**	**0.65**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

Inorganics Quality Control Summary

Analytical Batch	508638	**Client ID**	MB508449			LCS508449		
Prep Batch	508449	**GCAL ID**	1197173			1197174		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	7470A	**Prep Date**	05/31/2013 13:40			05/31/2013 13:40		
		Analytical Date	06/03/2013 13:20			06/03/2013 13:22		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.000068U	0.000068	0.0050	0.0051	103	80 - 120

Analytical Batch	508638	**Client ID**	MB508501			LCS508501		
Prep Batch	508501	**GCAL ID**	1197549			1197550		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	7470A	**Prep Date**	06/02/2013 07:40			06/02/2013 07:40		
		Analytical Date	06/03/2013 16:23			06/03/2013 16:25		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.000068U	0.000068	0.0050	0.0060	119	80 - 120

Analytical Batch	508638	**Client ID**	MB508578			LCS508578		
Prep Batch	508578	**GCAL ID**	1197903			1197904		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	7470A	**Prep Date**	06/02/2013 08:25			06/02/2013 08:25		
		Analytical Date	06/03/2013 15:25			06/03/2013 15:30		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.000068U	0.000068	0.0050	0.0058	117	80 - 120

Inorganics Quality Control Summary

Analytical Batch	508638	**Client ID**	MB508579			LCS508579		
Prep Batch	508579	**GCAL ID**	1197907			1197908		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	7470A	**Prep Date**	06/02/2013 10:00			06/02/2013 10:00		
		Analytical Date	06/03/2013 17:19			06/03/2013 17:20		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.000068U	0.000068	0.0050	0.0053	107	80 - 120

Analytical Batch	508638	**Client ID**	ALTX0525SO001(TCLP)			1196509MS			1196509MSD			
Prep Batch	508449	**GCAL ID**	21305292902			1197175			1197176			
Prep Method	SW-846	**Sample Type**	SAMPLE			MS			MSD			
	7470A	**Prep Date**	05/31/2013 13:40			05/31/2013 13:40			05/31/2013 13:40			
		Analytical Date	06/03/2013 13:24			06/03/2013 13:25			06/03/2013 13:27			
		Matrix	Solid			Solid			Solid			
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
			Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6	Mercury		0.000092	0.000068	0.0050	0.0054	107	75 - 125	0.0053	104	2	20

Analytical Batch	508638	**Client ID**	MA01MW003			MA01MW003-MS		
Prep Batch	508501	**GCAL ID**	21305310601			21305310602		
Prep Method	SW-846	**Sample Type**	SAMPLE			MS		
	7470A	**Prep Date**	06/02/2013 07:40			06/02/2013 07:40		
	Dissolved	**Analytical Date**	06/03/2013 16:27			06/03/2013 16:41		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.00009401	0.000068	0.0050	0.0054	106	75 - 125

Inorganics Quality Control Summary

Analytical Batch	508638	**Client ID**	0482-007		1196896MS			
Prep Batch	508449	**GCAL ID**	21305302007		1197368			
Prep Method	SW-846	**Sample Type**	SAMPLE		MS			
	7470A	**Prep Date**	05/31/2013 13:40		05/31/2013 13:40			
		Analytical Date	06/03/2013 18:29		06/03/2013 18:31			
		Matrix	Solid		Solid			
SW-846 1311/7470A		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.0	0.000068	0.0050	0.0058	116	75 - 125	

Analytical Batch	508638	**Client ID**	0482-006		1196895MS			1196895MSD				
Prep Batch	508578	**GCAL ID**	21305302006		1197905			1197906				
Prep Method	SW-846	**Sample Type**	SAMPLE		MS			MSD				
	7470A	**Prep Date**	06/02/2013 08:25		06/02/2013 08:25			06/02/2013 08:25				
		Analytical Date	06/03/2013 15:32		06/03/2013 15:34			06/03/2013 15:36				
		Matrix	Solid		Solid			Solid				
SW-846 1311/7470A		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-97-6	Mercury	0.0	0.000068	0.0050	0.0061	122	75 - 125	0.0061	122	0	20	

Analytical Batch	508638	**Client ID**	CONTAMINATED SOIL WITH DIESEL		1197093MS			
Prep Batch	508579	**GCAL ID**	21305304601		1197946			
Prep Method	SW-846	**Sample Type**	SAMPLE		MS			
	7470A	**Prep Date**	06/02/2013 10:00		06/02/2013 10:00			
		Analytical Date	06/03/2013 17:57		06/03/2013 17:59			
		Matrix	Solid		Solid			
SW-846 1311/7470A		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.0	0.000068	0.0050	0.0055	110	75 - 125	

Inorganics Quality Control Summary

Analytical Batch	508507	**Client ID**	MB508448	LCS508448
Prep Batch	508448	**GCAL ID**	1197169	1197170
Prep Method	SW-846	**Sample Type**	Method Blank	LCS
	3010A	**Prep Date**	05/31/2013 13:40	05/31/2013 13:40
		Analytical Date	06/01/2013 00:23	06/01/2013 00:29
		Matrix	Water	Water

SW-846 1311/6010C		**Units**	mg/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.56	112	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.52	105	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.52	103	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.52	105	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.54	108	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.54	108	80 - 120
7440-22-4	Silver	0.0035J	0.0025	0.50	0.52	103	80 - 120

Analytical Batch	508507	**Client ID**	ALTX0525SO001(TCLP)	1196509MS	1196509MSD
Prep Batch	508448	**GCAL ID**	21305292902	1197171	1197172
Prep Method	SW-846	**Sample Type**	SAMPLE	MS	MSD
	3010A	**Prep Date**	05/31/2013 13:40	05/31/2013 13:40	05/31/2013 13:40
		Analytical Date	06/01/2013 00:36	06/01/2013 00:42	06/01/2013 00:49
		Matrix	Solid	Solid	Solid

SW-846 1311/6010C		**Units**	mg/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-38-2	Arsenic	0.0	0.025	0.50	0.52	103	75 - 125	0.53	105	2	20
7440-39-3	Barium	0.98	0.013	0.50	1.44	92	75 - 125	1.44	93	0	20
7440-43-9	Cadmium	0.0	0.0063	0.50	0.53	107	75 - 125	0.53	106	0	20
7440-47-3	Chromium	0.0	0.013	0.50	0.50	101	75 - 125	0.49	99	2	20
7439-92-1	Lead	0.0	0.019	0.50	0.53	106	75 - 125	0.52	105	2	20
7782-49-2	Selenium	0.0	0.050	0.50	0.53	107	75 - 125	0.55	110	4	20
7440-22-4	Silver	0.035	0.013	0.50	0.56	105	75 - 125	0.55	103	2	20

Inorganics Quality Control Summary

Analytical Batch	508507	**Client ID**	0482-007	1196896MS
Prep Batch	508448	**GCAL ID**	21305302007	1197372
Prep Method	SW-846	**Sample Type**	SAMPLE	MS
	3010A	**Prep Date**	05/31/2013 13:40	05/31/2013 13:40
		Analytical Date	06/01/2013 01:41	06/01/2013 01:47
		Matrix	Solid	Solid

SW-846 1311/6010C		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-38-2	Arsenic	0.0	0.025	0.50	0.53	106	75 - 125
7440-39-3	Barium	0.24	0.013	0.50	0.79	111	75 - 125
7440-43-9	Cadmium	0.0	0.0063	0.50	0.53	106	75 - 125
7440-47-3	Chromium	0.0	0.013	0.50	0.49	99	75 - 125
7439-92-1	Lead	4.24	0.019	0.50	5.03	**158***	75 - 125
7782-49-2	Selenium	0.0	0.050	0.50	0.53	105	75 - 125
7440-22-4	Silver	0.036	0.013	0.50	0.55	102	75 - 125

Analytical Batch	508631	**Client ID**	MB508502	LCS508502
Prep Batch	508502	**GCAL ID**	1197553	1197554
Prep Method	SW-846	**Sample Type**	Method Blank	LCS
	3010A	**Prep Date**	06/02/2013 07:10	06/02/2013 07:10
		Analytical Date	06/03/2013 21:40	06/03/2013 21:48
		Matrix	Water	Water

SW-846 1311/6010C		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.49	98	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.51	101	80 - 120
7439-92-1	Lead	0.019J	0.0038	0.50	0.51	102	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.48	96	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.49	99	80 - 120

Inorganics Quality Control Summary

Analytical Batch	508631	**Client ID**	MB508577	LCS508577
Prep Batch	508577	**GCAL ID**	1197899	1197900
Prep Method	SW-846	**Sample Type**	Method Blank	LCS
	3010A	**Prep Date**	06/02/2013 07:10	06/02/2013 07:10
		Analytical Date	06/03/2013 15:23	06/03/2013 15:30
		Matrix	Water	Water

SW-846 1311/6010C		**Units**	mg/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.47	94	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.48	96	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.47	94	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.48	96	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.48	96	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.46	92	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.46	93	80 - 120

Analytical Batch	508631	**Client ID**	MB508586	LCS508586
Prep Batch	508586	**GCAL ID**	1197929	1197930
Prep Method	SW-846	**Sample Type**	Method Blank	LCS
	3010A	**Prep Date**	06/02/2013 10:00	06/02/2013 10:00
		Analytical Date	06/03/2013 19:33	06/03/2013 19:41
		Matrix	Water	Water

SW-846 1311/6010C		**Units**	mg/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.47	95	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.48	97	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.46	92	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.48	97	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.48	96	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.45	91	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.48	95	80 - 120

Inorganics Quality Control Summary

Analytical Batch	508631	**Client ID**	MA01MW003	MA01MW003-MS	MA01MW003-SD
Prep Batch	508502	**GCAL ID**	21305310601	21305310602	21305310603
Prep Method	SW-846	**Sample Type**	SAMPLE	MS	MSD
	3010A	**Prep Date**	06/02/2013 07:10	06/02/2013 07:10	06/02/2013 07:10
		Analytical Date	06/03/2013 21:55	06/03/2013 22:17	06/03/2013 22:24
		Matrix	Water	Water	Water

SW-846 1311/6010C		**Units**	mg/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-43-9	Cadmium	0.0	0.0013	0.50	0.47	95	75 - 125	0.49	98	4	20
7440-47-3	Chromium	0.0	0.0025	0.50	0.48	97	75 - 125	0.50	99	4	20
7439-92-1	Lead	0.0	0.0038	0.50	0.48	96	75 - 125	0.50	100	4	20
7782-49-2	Selenium	0.0	0.010	0.50	0.48	97	75 - 125	0.49	98	2	20
7440-22-4	Silver	0.0	0.0025	0.50	0.50	99	75 - 125	0.51	101	2	20

Analytical Batch	508631	**Client ID**	0482-006	1196895MS	1196895MSD
Prep Batch	508577	**GCAL ID**	21305302006	1197901	1197902
Prep Method	SW-846	**Sample Type**	SAMPLE	MS	MSD
	3010A	**Prep Date**	06/02/2013 07:10	06/02/2013 07:10	06/02/2013 07:10
		Analytical Date	06/03/2013 15:37	06/03/2013 15:45	06/03/2013 15:52
		Matrix	Solid	Solid	Solid

SW-846 1311/6010C		**Units**	mg/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-38-2	Arsenic	0.0	0.025	0.50	0.52	104	75 - 125	0.51	101	2	20
7440-39-3	Barium	0.34	0.013	0.50	0.88	107	75 - 125	0.89	109	1	20
7440-43-9	Cadmium	0.0	0.0063	0.50	0.52	104	75 - 125	0.51	103	2	20
7440-47-3	Chromium	0.032	0.013	0.50	0.59	111	75 - 125	0.58	110	2	20
7439-92-1	Lead	0.0	0.019	0.50	0.52	103	75 - 125	0.51	103	2	20
7782-49-2	Selenium	0.042	0.050	0.50	0.56	104	75 - 125	0.58	107	4	20
7440-22-4	Silver	0.0038	0.013	0.50	0.53	105	75 - 125	0.53	105	0	20

Inorganics Quality Control Summary

Analytical Batch	508631	**Client ID**	CONTAMINATED SOIL WITH DIESEL	1197093MS
Prep Batch	508586	**GCAL ID**	21305304601	1197947
Prep Method	SW-846	**Sample Type**	SAMPLE	MS
	3010A	**Prep Date**	06/02/2013 10:00	06/02/2013 10:00
		Analytical Date	06/03/2013 20:51	06/03/2013 20:58
		Matrix	Solid	Solid

SW-846 1311/6010C		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-38-2	Arsenic	0.0	0.025	0.50	0.48	96	75 - 125
7440-39-3	Barium	1.61	0.013	0.50	2.06	90	75 - 125
7440-43-9	Cadmium	0.0021	0.0063	0.50	0.49	98	75 - 125
7440-47-3	Chromium	0.0	0.013	0.50	0.51	102	75 - 125
7439-92-1	Lead	0.0	0.019	0.50	0.49	99	75 - 125
7782-49-2	Selenium	0.0	0.050	0.50	0.49	99	75 - 125
7440-22-4	Silver	0.0	0.013	0.50	0.51	103	75 - 125

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

Temp. Controls: 23 ± 2 °C

ANALYST: GRA/RJO/SRA
DATE: 5/30/13 - 5/31/13

HBN: 508393
BATCH: 7946

Min. Temp °C: 23.0
Max. Temp °C: 25.0

Sample Number:		TBLANK	21305302007	21305302008	51305302009
Sample Description		N/A	Dirt	Dirt	Dirt
Matrix Spike Required			MS	N/A	N/A
100% solid (Skip to 3)*	(√)		✓	✓	✓
Sample is <100%	(√)		N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)		✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)			5.0	5.0	5.0
Actual volume of water (96.5± 1mL)			96	96	96
Initial pH (After 5 min. mixing)	"pH-1"		8.39	8.57	8.31
√ If pH >5, if 3.5 mL 1N HCl added			✓	✓	✓
√ If heated and held at 50°C for 10 minutes			✓	✓	✓
Second pH	"pH-2"		2.05	1.76	1.05
If pH-1 or pH-2 <5.0 use Fluid 1	(√)		✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)		N/A	N/A	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)		N/A	N/A	N/A
Weight of Solids to be Extracted	(X)		100.0	100.1	100.1
Filtrate Vessel Weight (multiphasic)	(EV)		N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)		N/A	N/A	N/A
Amount of Fluid Needed = 20 x X			2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)		✓	N/A	N/A	N/A
Start Time/ Stop Time		14:40/08:00	14:40/08:00	14:40/08:00	14:40/08:00
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:			N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)			500	500	500
Volume filtrate from Step 4 (L)			N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)			5.40	6.23	~~9.~~ 8.02

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

RJO 5/31/13

Ext. Fluid #1 pH/ID: 552-42-2 4.95
Ext. Fluid #2 pH/ID: N/A
Balance ID: 111 733 1005

Rotator ID: 2,3
Rotation Start Date: 5/30/13
Rotation Stop Date: 5/31/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL
ANALYTICAL LABORATORIES, LLC

ANALYST: GRA/JRA/RJO
DATE: 5/30/13

HBN: 508394
BATCH: 7947

Temp. Controls:
Min. Temp °C: 23.0
Max. Temp °C: 25.0

Sample Number:		21305302004	21305302005	21305302006	21305302015
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A	N/A
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)			N	A
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2. EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	N/A	N/A	N/A	N/A
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0		
Actual volume of water (96.5± 1mL)		96	96		
Initial pH (After 5 min. mixing)	"pH-1"	9.05	8.92		
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓		
√ If heated and held at 50°C for 10 minutes		✓	✓		
Second pH	"pH-2"	3.13	2.59		
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓		
If pH-2 >5.0 use Fluid 11	(√)	N/A	N/A		
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A		
Weight of Solids to be Extracted	(X)	100.1	100.5		
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A		
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A		
Amount of Fluid Needed = 20 x X		2000	2000		
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		15:50/08:00	15:50/08:00		
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A		
Volume Extract obtained in Step 5 (EF-EV)		500	500		
Volume filtrate from Step 4 (L)		N/A	N/A		
pH of TCLP Extract (If two phase,record pH for each phase)		9.26	10.02		

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-42-2 4.95
Ext. Fluid #2 pH/ID: N/A
Balance ID: 111 733 1005

Rotator ID: 2,3
Rotation Start Date: 5/30/13
Rotation Stop Date: 5/31/13

* Samples 213 and 21305 were not set RJO 5/31/13

Revision 005 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

ANALYST: GRA/JRA/RJO
DATE: 5/30/13

HBN: 508394
BATCH: 7947

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 23.0
Max. Temp °C: 25.0

Sample Number:		TBLANK	21305302001	21305302002	21305302003
Sample Description		N/A	Dirt	Dirt	Dirt
Matrix Spike Required			MS	N/A	N/A
100% solid (Skip to 3)*	(√)		✓	✓	✓
Sample is <100%	(√)		N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)		✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)			5.0	5.0	5.0
Actual volume of water (96.5± 1mL)			96	96	96
Initial pH (After 5 min. mixing)	"pH-1"		8.59	8.72	9.01
√ If pH >5, if 3.5 mL 1N HCl added			✓	✓	✓
√ If heated and held at 50°C for 10 minutes			✓	✓	✓
Second pH	"pH-2"		1.93	2.17	3.05
If pH-1 or pH-2 <5.0 use Fluid 1	(√)		✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)		N/A	N/A	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)		N/A	N/A	N/A
Weight of Solids to be Extracted	(X)		100.0	100.0	100.5
Filtrate Vessel Weight (multiphasic)	(EV)		N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)		N/A	N/A	N/A
Amount of Fluid Needed = 20 x X			2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)		✓			
Start Time/ Stop Time		15:50 / 08:00	15:50 / 08:00	15:50 / 08:00	15:50 / 08:00
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:			N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)			500	500	500
Volume filtrate from Step 4 (L)			N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)			6.23	8.80	9.52

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-42-2 4.95
Ext. Fluid #2 pH/ID: N/A
Balance ID: 1117331005

Rotator ID: 2,3
Rotation Start Date: 5/30/13
Rotation Stop Date: 5/31/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

Temp. Controls: 23 ± 2 °C

ANALYST: GRA/RJO/SRA
DATE: 5/30/13 - 5/31/13

HBN: 508393
BATCH: 7946

Min. Temp °C: 23.0
Max. Temp °C: 25.0

Sample Number:		21305302014	21305302025	21305302026	N/A
Sample Description		Dirt	Dirt	Dirt	
Matrix Spike Required		N/A	N/A	N/A	
100% solid (Skip to 3)*	(√)	✓	✓	✓	
Sample is <100%	(√)	N/A	N/A	N/A	
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	✓	✓	✓	
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0	
Actual volume of water (96.5± 1mL)		96	96	96	
Initial pH (After 5 min. mixing)	"pH-1"	7.65	8.79	8.99	
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	
Second pH	"pH-2"	2.37	2.10	2.54	
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓	✓	
If pH-2 >5.0 use Fluid 11	(√)	N/A	N/A	N/A	
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A	N/A	
Weight of Solids to be Extracted	(X)	100.2	100.1	100.0	
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A	N/A	
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A	N/A	
Amount of Fluid Needed = 20 x X		2000	2000	2000	
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		14:40/08:00	14:40/08:00	14:40/08:00	~~14:40/08:00~~
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A	
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	
Volume filtrate from Step 4 (L)		N/A	N/A	N/A	
pH of TCLP Extract (If two phase,record pH for each phase)		9.81	6.05	6.25	

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-42-2 4.95
Ext. Fluid #2 pH/ID: N/A
Balance ID: 111 733 1005

Rotator ID: 2,3
Rotation Start Date: 5/30/13
Rotation Stop Date: 5/31/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: GRA / RJO / JRA
DATE: 5/30/13 - 5/31/13

HBN: 508393
BATCH: 7946

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 23.0
Max. Temp °C: 25.0

Sample Number:		21305302010	21305302011	21305302012	21305302013
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A	N/A
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	✓	✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96	96	96	96
Initial pH (After 5 min. mixing)	"pH-1"	8.76	8.21	8.59	8.21
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	1.99	1.35	2.37	1.59
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)	N/A	N/A	N/A	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A	N/A	N/A
Weight of Solids to be Extracted	(X)	100.1	100.4	100.5	100.1
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)		✓	✓	✓	✓
Start Time/ Stop Time		14:40 / 08:00	14:40 / 08:00	14:40 / 08:00	14:00 / 08:00
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)		N/A	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)		6.16	9.81	9.50	9.23

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-42-2 4.95
Ext. Fluid #2 pH/ID: N/A
Balance ID: 111733 1005

Rotator ID: 2,3
Rotation Start Date: 5/30/13
Rotation Stop Date: 5/31/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

Temp. Controls: 23 ± 2 °C

ANALYST: _____ HBN: 7949 Min. Temp °C: _____

DATE: _____ BATCH: 508472 Max. Temp °C: _____

Sample Number:	21305302040	21305302042	21305302041	21305302[illegible]
Sample Description	Dirt	Dirt	Dirt	Dirt
Matrix Spike Required	N/A	N/A	N/A	N/A
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)	✓	✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)	96.0	96.0	96.0	96.0
Initial pH (After 5 min. mixing) "pH-1"	10.04	10.71	10.62	11.02
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	8.04	9.17	~~8~~ SRA 5/31/13 8.90	5.19
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	N/A	N/A	N/A	N/A
If pH-2 >5.0 use Fluid 11 (√)	✓	✓	✓	✓
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)	N/A	N/A	N/A	N/A
Weight of Solids to be Extracted (X)	100.2	100.1	100.1	100.0
Filtrate Vessel Weight (multiphasic) (EV)	N/A	N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic) (EF)	N/A	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	17:00/10:00	17:00/10:00	17:00/10:00	17:00/10:[illegible]
5. FINAL TCLP EXTRACT			~~17:00/10:00~~ RSD 6/1/13	
If the phases will be analyzed separately, determine the volume of each phase:	N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)	500	500	500	500
Volume filtrate from Step 4 (L)	N/A	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)	6.88	9.66	9.65	4.39

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: N/A Rotator ID: 1,2,3,4,5,6

Ext. Fluid #2 pH/ID: Same as pg 47 Rotation Start Date: 5/31/13

Balance ID: 1117331005 Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013 Reviewer/Date: _____

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTION

ANALYST: RJO/JRA
DATE: 5/31/13

HBN: 508471
BATCH: 7948

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:		21305302028	21305302027	21305302034	21305302029
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A	N/A
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	✓	✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)		5.0	5.1	5.1	5.0
Actual volume of water (96.5± 1mL)		96.0	96.0	96.0	96.0
Initial pH (After 5 min. mixing)	"pH-1"	9.62	10.72	10.74	9.90
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	2.29	4.58	3.72	3.25
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)	N/A	N/A	N/A	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A	N/A	N/A
Weight of Solids to be Extracted	(X)	100.0	100.0	100.1	100.0
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		17:00/10:00	17:00/10:00	17:00/10:00	17:00/10:00
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)		N/A	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)		6.64	7.70	5.60	8.82

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: See pg 41
Ext. Fluid #2 pH/ID: See pg 41
Balance ID: 1117331005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: RJO / JRA
DATE: 5/31/13

HBN: 7949
BATCH: 508472

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number: 2130	5302045	T-BIK FL 2	2130531401	2130531140
Sample Description	Dirt		Rocks	Rocks
Matrix Spike Required	N/A		MS	~~MS~~ JRA NCK
100% solid (Skip to 3)* (√)	✓		✓	✓
Sample is <100% (√)	N/A		N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)	✓		✓	✓
Actual Weight of subsample (5.0± 0.1g)	5.0		5.1	5.0
Actual volume of water (96.5± 1mL)	96.0		96.0	96.0
Initial pH (After 5 min. mixing) "pH-1"	11.66		11.25	8.93
√ If pH >5, if 3.5 mL 1N HCl added	✓		✓	✓
√ If heated and held at 50°C for 10 minutes	✓		✓	✓
Second pH "pH-2"	10.87		9.88	5.60
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	N/A		N/A	N/A
If pH-2 >5.0 use Fluid 11 (√)	✓		✓	✓
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)	N/A		N/A	N/A
Weight of Solids to be Extracted (X)	100.4		100.0	100.1
Filtrate Vessel Weight (multiphasic) (EV)	N/A		N/A	N/A
Weight of Filtrate + Vessel (multiphasic) (EF)	N/A	✓	N/A	N/A
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	17:00 / 10:00	17:00 / 10:00	17:00 / 10:00	17:00 / 10:00
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:	N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)	500		500	500
Volume filtrate from Step 4 (L)	N/A		N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)	6.23		~~4.60~~ 6.63 RJO 6/1/13	4.60

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: N/A
Ext. Fluid #2 pH/ID: 2.90 553-2-1, 2.90 553-2-2
Balance ID: 1117331005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: RJO/JRA
DATE: 5/31/13

HBN: 508471
BATCH: 7948

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:		21305302036	21305302022	21305302032	21305302041
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A	N/A
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	✓	✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)		5.0	5.1	5.0	5.0
Actual volume of water (96.5± 1mL)		96.0	96.0	96.0	96.0
Initial pH (After 5 min. mixing)	"pH-1"	11.65	10.16	10.34	11.98
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	9.23	6.35	8.96	6.04
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	N/A	N/A	N/A	N/A
If pH-2 >5.0 use Fluid 11	(√)	✓	✓	✓	✓
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A	N/A	N/A
Weight of Solids to be Extracted	(X)	100.4	100.1	100.3	100.0
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		17:00/10:00	17:00/10:00	17:00/10:00	17:00/10:0
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)		N/A	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)		4.55	4.97	5.42	5.99

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: See pg 41
Ext. Fluid #2 pH/ID: See pg 41
Balance ID: 1117331005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Reviewer/Date:

Revision 005: 5/14/2013

GCAL ANALYTICAL LABORATORIES, LLC

ANALYST: RJO / JRA
DATE: 5/31/13

HBN: 508471
BATCH: 7948

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:	21305302038	21305302039	21305302037	21305302
Sample Description	Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)	✓	✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.1
Actual volume of water (96.5± 1mL)	96.0	96.0	96.0	96.0
Initial pH (After 5 min. mixing) "pH-1"	10.12	10.47	10.30	10.21
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	6.82	7.03	6.52	8.64
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	N/A	N/A	N/A	N/A
If pH-2 >5.0 use Fluid 11 (√)	✓	✓	✓	✓
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)	N/A	N/A	N/A	N/A
Weight of Solids to be Extracted (X)	100.0	100.3	100.1	100.2
Filtrate Vessel Weight (multiphasic) (EV)	N/A	N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic) (EF)	N/A	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	17:00 / 10:00	17:00 / 10:00	17:00 / 10:00	17:00 / 10:00
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:	N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)	RJO 6/1/13 ~~N/A~~ 500	500	500	500
Volume filtrate from Step 4 (L)	N/A ~~500~~ RJO 6/1/13	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)	6.53	6.94	6.46	5.66

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: See pg 41
Ext. Fluid #2 pH/ID: See pg 41
Balance ID: 1117331005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: RJO / JRA
DATE: 5/31/13

HBN: 508471
BATCH: 7948

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:	21305302021	21305302024	21305302030	21305302
Sample Description	Dirt ★	Dirt	Dirt	Dirt
Matrix Spike Required				
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)		N/A	N/A	
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)				
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)	96.0	96.0	96.0	96.0
Initial pH (After 5 min. mixing) "pH-1"	9.73	10.51	9.99	10.28
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	5.28	8.74	5.85	6.64
If pH-1 or pH-2 <5.0 use Fluid 1 (√)		N/A	N/A	N/A
If pH-2 >5.0 use Fluid 11 (√)	✓	✓	✓	✓
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)		N/A	N/A	N/A
Weight of Solids to be Extracted (X)	100.2	100.1	100.0	100.1
Filtrate Vessel Weight (multiphasic) (EV)		N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic) (EF)		N/A	N/A	N/A
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time		17:00 / 10:00	17:00 / 10:00	17:00 / 10:0
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)		500	500	500
Volume filtrate from Step 4 (L)		N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)		8.77	5.20	4.66

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

★ Sample 21305302021 n set up to rotate.

Ext. Fluid #1 pH/ID: See pg 41
Ext. Fluid #2 pH/ID: See pg 41
Balance ID: 1117331005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Reviewer/Date:

Revision 005: 5/14/2013

GCAL ANALYTICAL LABORATORIES, LLC

ANALYST: RSO / JRA
DATE: 5/31/13

HBN: 508471
BATCH: 7948

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:		21305302017	21305302018	21305302019	21305302[illegible]
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		N/A	N/A	N/A	N/A
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)	N/A	N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	↓	↓	↓	↓
Actual Weight of subsample (5.0± 0.1g)		5.0	5.1	5.0	5.1
Actual volume of water (96.5± 1mL)		96.0	96.0	96.0	96.0
Initial pH (After 5 min. mixing)	"pH-1"	11.30	11.80	9.54	9.66
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	2.74	7.72	3.50	3.60
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	N/A	✓	✓
If pH-2 >5.0 use Fluid 11	(√)	N/A	✓	N/A	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A	N/A	N/A
Weight of Solids to be Extracted	(X)	100.0	100.2	100.2	100.0
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)		~~17~~ JRA 6/1/13			
Start Time/ Stop Time		17:00/10:00	17:00/10:00	17:00/10:00	17:00/10:[illegible]
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)		500		500	500
Volume filtrate from Step 4 (L)		N/A		N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)		6.09		6.75	8.87

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: See pg 41
Ext. Fluid #2 pH/ID: See pg 41
Balance ID: 1117331005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: RSO/JRA
DATE: 5/31/13

HBN: 508471
BATCH: 7948

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:		T-BLK F1 1,2	2130530 2006	2130530 2015	2130530 2016
Sample Description		N/A	Dirt	Dirt	Dirt
Matrix Spike Required			MS	N/A	N/A
100% solid (Skip to 3)*	(√)		✓	✓	✓
Sample is <100%	(√)		N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)		✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)			5.1	5.0	5.0
Actual volume of water (96.5± 1mL)			96.0	96.0	96.0
Initial pH (After 5 min. mixing)	"pH-1"		10.41	10.62	10.52
√ If pH >5, if 3.5 mL 1N HCl added			✓	✓	✓
√ If heated and held at 50°C for 10 minutes			✓	✓	✓
Second pH	"pH-2"		8.98	8.97	1.74
If pH-1 or pH-2 <5.0 use Fluid 1	(√)		N/A	N/A	✓
If pH-2 >5.0 use Fluid 11	(√)		✓	✓	N/A
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)		N/A	N/A	N/A
Weight of Solids to be Extracted	(X)		100.0	100.4	100.1
Filtrate Vessel Weight (multiphasic)	(EV)		N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic)	(EF)	✓	N/A	N/A	N/A
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		17:00 / 10:00	17:00 / 10:00	17:00 / 10:00	17:00 / 10:00
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:		N/A	N/A	N/A	N/A
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)		N/A	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)		N/A	9.13	9.28	5.34

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 4.91 552-43-1, 4.90 552-43-2 Rotator ID: 1,2,3,4,5,6
Ext. Fluid #2 pH/ID: 2.87 553-1-3, 2.90 553-2-1, 2.90 553-2-2 Rotation Start Date: 5/31/13
Balance ID: 1117331005 Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

ANALYST: JRA
DATE: 6/1/13

HBN: 508585
BATCH: 7954

Temp. Controls:
Min. Temp °C: 22.1
Max. Temp °C: 26.9

Sample Number:	T-BIK FL1	2130530460i	2130530520i	2130530202
Sample Description	N/A	Dirt	Catalyst	Dirt
Matrix Spike Required		MS	MS	N/A
100% solid (Skip to 3)* (√)		✓	✓	✓
Sample is <100% (√)		N/A	N/A	N/A
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100* (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)		✓	✓	✓
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96.0	96.0	96.0
Initial pH (After 5 min. mixing) "pH-1"		7.38	4.13	9.73
√ If pH >5, if 3.5 mL 1N HCl added		✓	N/A	✓
√ If heated and held at 50°C for 10 minutes		✓		✓
Second pH "pH-2"		4.66	✓	5.28
If pH-1 or pH-2 <5.0 use Fluid 1 (√)		✓	✓	N/A
If pH-2 >5.0 use Fluid 11 (√)		N/A	N/A	✓
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)		N/A	N/A	N/A
Weight of Solids to be Extracted (X)		99.9	100.0	100.2
Filtrate Vessel Weight (multiphasic) (EV)		N/A	N/A	N/A
Weight of Filtrate + Vessel (multiphasic) (EF)	✓	↓	↓	↓
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	10:30/4:30	10:30/4:30	10:30/4:30	10:30/4:[illegible]
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:				
Volume Extract obtained in Step 5 (EF-EV)	1500	2000	2000	500
Volume filtrate from Step 4 (L)	N/A	N/A	N/A	N/A
pH of TCLP Extract (If two phase,record pH for each phase)	↓	6.49	4.63	5.49

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 4.90/552-43-2
Ext. Fluid #2 pH/ID: 2.90/553-2-2
Balance ID: 1117331005

Rotator ID: 2,3,5
Rotation Start Date: 6/1/13
Rotation Stop Date: 6/2/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTION

ANALYST: RSO/JRA
DATE: 5/31/13

HBN: 508472
BATCH: 7949

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 24.3
Max. Temp °C: 26.2

Sample Number:		21305302033	21305302043		
Sample Description		Dirt	Dirt		
Matrix Spike Required		N/A	N/A		
100% solid (Skip to 3)*	(√)	✓	✓		
Sample is <100%	(√)	N/A	N/A		
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)	✓	✓		
Actual Weight of subsample (5.0± 0.1g)		5.1	5.1		
Actual volume of water (96.5± 1mL)		96.0	96.0		
Initial pH (After 5 min. mixing)	"pH-1"	10.44	11.41		
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓		
√ If heated and held at 50°C for 10 minutes		✓	✓		
Second pH	"pH-2"	8.85	6.72		
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	N/A	N/A		
If pH-2 >5.0 use Fluid 11	(√)	✓	✓		
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)	N/A	N/A		
Weight of Solids to be Extracted	(X)	100.0	100.2		
Filtrate Vessel Weight (multiphasic)	(EV)	N/A	N/A		
Weight of Filtrate + Vessel (multiphasic)	(EF)	N/A	N/A		
Amount of Fluid Needed = 20 x X		2000	2000		
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		17:00/10:00	17:00/10:00		
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:					
Volume Extract obtained in Step 5 (EF-EV)		500	500		
Volume filtrate from Step 4 (L)		N/A	N/A		
pH of TCLP Extract (If two phase,record pH for each phase)		9.05	5.84		

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: N/A
Ext. Fluid #2 pH/ID: Same as page 47
Balance ID: 111733 1005

Rotator ID: 1,2,3,4,5,6
Rotation Start Date: 5/31/13
Rotation Stop Date: 6/1/13

Revision 005: 5/14/2013

Reviewer/Date:

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Kemron	4794	213053020	6/4/13

Report to:
Client: Kemron
Address: 1359-A Ellsworth Ind Blvd Atl, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Bill to:
Client: Kemron
Address: 1359-A Ellsworth Ind Blvd Atl, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

P.O. Number: SH0482
Project Name/Number: Trinity NS 5/SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 1.6 (E22

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	TCLP RCRA Metals 1311/6010/7470	TCLP Reactivity pH 9045	Remarks:	Lab ID
S	5/29/13	1005			0482-001	None	1	X	X		1
		1010			0482-002			X	X		2
		1020			0482-003			X	X		3
		1030			0482-004			X	X		4
		1035			0482-005			X	X		5
		1040			0482-006			X	X		6
		1050			0482-007			X	X		7
		1055			0482-008			X	X		8
		1056			0482-009			X	X		9
		1105			0482-010			X	X		10
		1110			0482-011			X	X		11
		1115			0482-012			X	X		12
		1120			0482-013			X	X		13
		1130			0482-014			X	X		14

Turn Around Time: ☐ 24-48 hrs. ☒ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Tomecia Riley		5/29/13	1530
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed EX	S. Glass	5/30/13	10:30
Relinquished by: (Signature)			

Note: Due date 6/4/13
submit TCLP all logs w/ results

7998 7280 3794

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client #	Workorder #	Due Date
Kemron (Client Name)	4794	213053020	6/4/13

Report to:
Client: Kemron
Address: 1359-A Ellsworth Ind. Blvd Atl, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Bill to:
Client: Kemron
Address: 1359-A Ellsworth Ind. Blvd Atl, Ga 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

P.O. Number: SH0482
Project Name/Number: Trinity NSS / SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 1.6 (E22)

Matrix[1]	Date	Time (2400)	comp	grab	Sample Description	Preservatives	No Containers	TCLP RCRA Metals 1311/6010/7470	TCLP Leachate pH 9045	Remarks:	Lab ID
S	5/29/13	1132			0482-015	None	1	X	X		15
		1135			0482-016			X	X		16
		1143			0482-017			X	X		17
		1145			0482-018			X	X		18
		1230			0482-019			X	X		19
		1234			0482-020			X	X		20
		1236			0482-021			X	X		21
		1304			0482-022			X	X		22
		1311			0482-023			X	X		23
		1315			0482-024			X	X		24
		1323			0482-025			X	X		25
		1325			0482-026			X	X		26
		1328			0482-027			X	X		27
		1335			0482-028			X	X		28

Turn Around Time: ☐ 24-48 hrs. ☒ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Tomecia Riley		5/29/13	1530
Fed Ex	S. Glen	~~5-29-13~~ 5-30-13	10:30

Note: Due date 6/4/13 submit TCLP logs with results

7998 7280 3794

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Kemron	4794	213053020	6/4/13

Report to:
Client: Kemron
Address: 1359-A Ellsworth Ind. Blvd Atl, Ga 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Bill to:
Client: Kemron
Address: 1359-A Ellsworth Ind. Blvd Atl, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

P.O. Number: SH0482
Project Name/Number: Trinity N & S / SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 1.5 (E22)

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	TCLP RCRA Metals 1311/6010/7470	TCLP Leachate pH 9045	Remarks:	Lab ID
S	5/29/13	1338			0482-029	None	1	X	X		29
		1344			0482-030			X	X		30
		1352			0482-031			X	X		31
		1354			0482-032			X	X		32
		1357			0482-033			X	X		33
		1403			0482-034			X	X		34
		1405			0482-035			X	X		35
		1410			0482-036			X	X		36
		1424			0482-037			X	X		37
		1428			0482-038			X	X		38
		1431			0482-039			X	X		39
		1440			0482-040			X	X		40
		1443			0482-041			X	X		41
		1447			0482-042			X	X		42

Turn Around Time: ☐ 24-48 hrs. ☒ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Tomecia Riley		5/29/13	1530
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed EX	S. Mea	5-30-13	10:30

Note: Due 6/4/13
Submit TCLP pH log with results

7998 7280 3794

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client #	Workorder #	Due Date
Kemron (Client Name)	4794	213053020	6/4/13

Report to:
Client: Kemron
Address: 1359-A Ellsworth Ind. Blvd. Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

Bill to:
Client: Kemron
Address: 1359-A Ellsworth Ind. Blvd Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
Fax:

P.O. Number: SH0482
Project Name/Number: Trinity N & S / SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 1.6 (E22)

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	TCLP RCRA Metals 1311/6010/7470	TCLP Leachate pH 9045	Remarks:	Lab ID
S	5/29/13	1451		X	0482-043	None	1	X	X		43
S	↓	1455		X	0482-044	↓	1	X	X		44
S	↓	1457		X	0482-045	↓	1	X	X		45

Turn Around Time: ☐ 24-48 hrs. ☑ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Tomecia Riley		5/29/13	1530
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed Ex	S. Glass	5-30-13	10:30

Note: Due June 4, 2013 7998 7280 3794
Submit TCLP pH Logs with results

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

213053020

SAMPLE DELIVERY GROUP	213053020
Client 4794 - KEMRON	**Transport Method** FEDEX
Profile Number 242849	**Received By** Naquin, Allison
Line Item(s) 1 - RCRA Metals Soil	**Receive Date(s)** 05/30/13

CHECKLIST

	Yes	No	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☐	☐	☑
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☐	☐	☑
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑	☐	☐

COOLERS

Airbill	Temp(oC)
7998 7280 3794	1.6 (E22)

DISCREPANCIES

None

LABORATORY PRESERVATIONS

None

NOTES

APPENDIX D

ADDITIONAL MIXTURE DEVELOPMENT SHEETS

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-046
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-047
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-048
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-049
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-050
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-051
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-052
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-053
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-N2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-054
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION — 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION — 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-055
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-056
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-057
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S1**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-058
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-059
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-060
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-061
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S2**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-062
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend 90/10	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	
PROJECT No.:	SH0482		0482-063
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	2.00 %	4.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-064
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	3.00 %	6.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES

MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES

CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION 7 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION 28 days

INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

MIX DEVELOPMENT DATA SHEET

PROJECT:	Trinity North & South ISS	MIX No.	0482-065
PROJECT No.:	SH0482		
MIXING DATE:	2-Jul-13	MIXED BY:	TNR/RPH

UNTREATED MATERIAL TYPE		**ST-S3**
WEIGHT OF UNTREATED MATERIAL		**200 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Enviroblend CS	4.00 %	8.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

MONITORING ACTIVITIES					
MONITORING ACTIVITIES	TIME PERIOD				
MAXIMUM PID (ppm)					
Notes / Observations:					

PENETROMETER ANALYSES					
CURE TIME (Days)		2	5	7	
PENETROMETER (tons/ft^2)					

VOLUMETRIC EXPANSION		7 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

VOLUMETRIC EXPANSION		28 days
INITIAL HEIGHT (in):	FINAL HEIGHT (in):	
VOLUMETRIC EXPANSION (%):	#DIV/0!	

APPENDIX E

ADDITIONAL TREATED ANATLYICAL RESULTS

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 07/09/2013

GCAL Report 213070331

Deliver To	KEMRON 1359A Ellsworth Industrial Blv Atlanta, GA 30318 404-601-6927
Attn	Tommy Jordan

Project Trinity North & South

CASE NARRATIVE

Client: KEMRON **Report:** 213070331

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

METALS

In the SW-846 1311/6010C analysis, all samples were analyzed at a dilution. The reporting limits are at or below the regulatory limits at this dilution.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature

GCAL REPORT 213070331

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

CAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307033101	0482-046	Solid	07/02/2013 12:45	07/03/2013 10:20
21307033102	0482-047	Solid	07/02/2013 12:50	07/03/2013 10:20
21307033103	0482-048	Solid	07/02/2013 12:53	07/03/2013 10:20
21307033104	0482-049	Solid	07/02/2013 13:05	07/03/2013 10:20
21307033105	0482-050	Solid	07/02/2013 13:11	07/03/2013 10:20
21307033106	0482-051	Solid	07/02/2013 13:15	07/03/2013 10:20
21307033107	0482-052	Solid	07/02/2013 13:18	07/03/2013 10:20
21307033108	0482-053	Solid	07/02/2013 13:28	07/03/2013 10:20
21307033109	0482-054	Solid	07/02/2013 13:35	07/03/2013 10:20
21307033110	0482-055	Solid	07/02/2013 13:40	07/03/2013 10:20
21307033111	0482-056	Solid	07/02/2013 13:41	07/03/2013 10:20
21307033112	0482-057	Solid	07/02/2013 13:50	07/03/2013 10:20
21307033113	0482-058	Solid	07/02/2013 13:54	07/03/2013 10:20
21307033114	0482-059	Solid	07/02/2013 13:55	07/03/2013 10:20
21307033115	0482-060	Solid	07/02/2013 13:57	07/03/2013 10:20
21307033116	0482-061	Solid	07/02/2013 14:07	07/03/2013 10:20
21307033117	0482-062	Solid	07/02/2013 14:10	07/03/2013 10:20
21307033118	0482-063	Solid	07/02/2013 14:12	07/03/2013 10:20
21307033119	0482-064	Solid	07/02/2013 14:21	07/03/2013 10:20
21307033120	0482-065	Solid	07/02/2013 14:22	07/03/2013 10:20

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331101	0482-046	Solid	07/02/2013 12:45	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.078J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331102	0482-047	Solid	07/02/2013 12:50	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.43J	5.00	0.013	mg/L
7439-92-1	Lead	0.17J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331103	0482-048	Solid	07/02/2013 12:53	07/03/2013 10:20

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000071J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.23J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331104	0482-049	Solid	07/02/2013 13:05	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.26J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331105	0482-050	Solid	07/02/2013 13:11	07/03/2013 10:20

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000082J	0.0020	0.000068	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331105	0482-050	Solid	07/02/2013 13:17	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.36J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331106	0482-051	Solid	07/02/2013 13:15	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.08J	5.00	0.013	mg/L
7439-92-1	Lead	0.39J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331107	0482-052	Solid	07/02/2013 13:18	07/03/2013 10:20

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000072J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.82J	5.00	0.013	mg/L
7440-47-3	Chromium	0.039J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331108	0482-053	Solid	07/02/2013 13:28	07/03/2013 10:20

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000086J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.41J	5.00	0.013	mg/L
7440-47-3	Chromium	0.048J	0.25	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	0482-0[illegible]	Solid	07/02/2013 13:36	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.88J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.012J	0.050	0.0063	mg/L
7439-92-1	Lead	1.89	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	0482-0[illegible]	Solid	07/02/2013 13:40	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.46J	5.00	0.013	mg/L
7440-43-9	Cadmium	0.013J	0.050	0.0063	mg/L
7439-92-1	Lead	0.81	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	0482-0[illegible]	Solid	07/02/2013 13:41	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.75J	5.00	0.013	mg/L
7440-47-3	Chromium	0.016J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	0482-0[illegible]	Solid	07/02/2013 13:50	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.67J	5.00	0.013	mg/L
7440-47-3	Chromium	0.024J	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	0482-0[illegible]	Solid	07/02/2013 13:54	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.31J	5.00	0.013	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331114	0482-059	Solid	07/02/2013 13:55	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.77J	5.00	0.013	mg/L
7439-92-1	Lead	0.091J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331115	0482-060	Solid	07/02/2013 13:57	07/03/2013 10:20

SW-846 1311/7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000080J	0.0020	0.000068	mg/L

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.41J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331116	0482-061	Solid	07/02/2013 14:07	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.34J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331117	0482-062	Solid	07/02/2013 14:10	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.53J	5.00	0.013	mg/L
7439-92-1	Lead	0.13J	0.50	0.019	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331118	0482-063	Solid	07/02/2013 14:12	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.58J	5.00	0.013	mg/L
7439-92-1	Lead	0.16J	0.50	0.019	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070330[illegible]	0402-0[illegible]	Soil	07/02/2013 14:21	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.53J	5.00	0.013	mg/L
7440-47-3	Chromium	1.06	0.25	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070330[illegible]	0402-0[illegible]	Soil	07/02/2013 14:2[illegible]	07/03/2013 10:20

SW-846 1311/6010C

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.46J	5.00	0.013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331/7	0492-048	Solid	07/02/2013 11:45	07/03/2013 16:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:15	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/08/2013 23:14	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.078J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-02	0482-047	Solid	07/02/2013 12:50	07/08/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:22	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/08/2013 23:52	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.43J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.17J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-01	0492-04B	Solid	07/02/2013 12:13	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:24	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.000071J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/08/2013 23:59	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.23J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331001	0412-149	Solid	07/02/2013 15:05	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:25	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 00:07	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.26J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-005	0492-058	Solid	07/09/2013 13:11	07/09/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:27	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.000082J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 00:15	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.36J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS.

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:32	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 00:38	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.08J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.39J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331007	0482-062	Solid	07/02/2013 13:18	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:34	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.000072J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 00:46	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.82J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.039J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
2130703310B	0192-063	Solid	07/08/2013 13:25	07/09/2013 13:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:36	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.000086J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 00:54	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.41J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.048J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	04B1[illegible]	Solid	07/0[illegible]/2013 [illegible]	07/0[illegible]/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:38	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:02	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.88J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.012J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**1.89**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-10	0432-0s5	Solid	07/02/2013 13:40	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:40	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:10	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**1.46J**	**5.00**	**0.013**	**mg/L**
7440-43-9	**Cadmium**	**0.013J**	**0.050**	**0.0063**	**mg/L**
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.81**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-11	0482-058	Solid	07/02/2013 13:44	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:41	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:19	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.75J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.016J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331012	[illegible]	Solid	[illegible]	[illegible]

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:43	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:27	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.67J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**0.024J**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-13	0432-038	Solid	07/02/2013 13:54	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:45	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:35	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.31J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	0482-050	Solid	07/02/2013 13:55	07/02/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:47	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:42	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.77J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.091J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL Id	Client ID	Matrix	Collect Date/Time	Receive Date/Time
2130703311 5	0482-060	Solid	07/02/2013 13:57	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:48	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.000080J**	**0.0020**	**0.000068**	**mg/L**

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 01:50	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.41J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331[illegible]	[illegible]	Solid	07/02/2013 14:07	07/08/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:54	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 02:12	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.34J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331117	0432-062	Solid	07/02/2013 14:10	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:55	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 02:20	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.53J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.13J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collection Date/Time	Receive Date/Time
213070331-01	[illegible]	Solid	07/02/2013 [illegible]	07/08/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:57	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 02:28	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.58J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	**Lead**	**0.16J**	**0.50**	**0.019**	**mg/L**
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070331-19	0482-064	Solid	07/02/2013 14:31	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 13:59	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 02:35	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.53J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	**Chromium**	**1.06**	**0.25**	**0.013**	**mg/L**
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
213070330120	0462-065	Solid	07/02/2013 14:22	07/03/2013 10:20

SW-846 1311/7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511239	SW-846 7470A	1	07/09/2013 14:00	BAM	511334

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.0020	0.000068	mg/L

SW-846 1311/6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/08/2013 09:50	511236	SW-846 3010A	5	07/09/2013 02:42	BAM	511314

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025U	1.00	0.025	mg/L
7440-39-3	**Barium**	**0.46J**	**5.00**	**0.013**	**mg/L**
7440-43-9	Cadmium	0.0063U	0.050	0.0063	mg/L
7440-47-3	Chromium	0.013U	0.25	0.013	mg/L
7439-92-1	Lead	0.019U	0.50	0.019	mg/L
7782-49-2	Selenium	0.050U	0.50	0.050	mg/L
7440-22-4	Silver	0.013U	0.25	0.013	mg/L

RESULTS REPORTED ON A WET WEIGHT BASIS

Inorganics Quality Control Summary

Analytical Batch	511334	**Client ID**	MB511239			LCS511239		
Prep Batch	511239	**GCAL ID**	1211192			1211193		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	7470A	**Prep Date**	07/08/2013 09:50			07/08/2013 09:50		
		Analytical Date	07/09/2013 13:12			07/09/2013 13:13		
		Matrix	Water			Water		
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury		0.000087J	0.000068	0.0050	0.0046	93	80 - 120

Analytical Batch	511334	**Client ID**	0482-046			1210133MS			1210133MSD			
Prep Batch	511239	**GCAL ID**	21307033101			1211194			1211195			
Prep Method	SW-846	**Sample Type**	SAMPLE			MS			MSD			
	7470A	**Prep Date**	07/08/2013 09:50			07/08/2013 09:50			07/08/2013 09:50			
		Analytical Date	07/09/2013 13:15			07/09/2013 13:17			07/09/2013 13:18			
		Matrix	Solid			Solid			Solid			
SW-846 1311/7470A			**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
			Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6	Mercury		0.0	0.000068	0.0050	0.0047	93	75 - 125	0.0045	91	4	20

Inorganics Quality Control Summary

Analytical Batch	511314	**Client ID**	MB511236			LCS511236		
Prep Batch	511236	**GCAL ID**	1211180			1211181		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	3010A	**Prep Date**	07/08/2013 09:50			07/08/2013 09:50		
		Analytical Date	07/08/2013 22:45			07/08/2013 23:07		
		Matrix	Water			Water		
SW-846 1311/6010C			**Units**	mg/L	**Spike**	**Result**		**Control**
			Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-38-2	Arsenic		0.0050U	0.0050	0.50	0.50	100	80 - 120
7440-39-3	Barium		0.0025U	0.0025	0.50	0.50	101	80 - 120
7440-43-9	Cadmium		0.0013U	0.0013	0.50	0.49	99	80 - 120
7440-47-3	Chromium		0.0025U	0.0025	0.50	0.51	101	80 - 120
7439-92-1	Lead		0.0038U	0.0038	0.50	0.50	101	80 - 120
7782-49-2	Selenium		0.010U	0.010	0.50	0.50	100	80 - 120
7440-22-4	Silver		0.0025U	0.0025	0.50	0.51	102	80 - 120

Analytical Batch	511314	**Client ID**	0482-046			1210133MS			1210133MSD			
Prep Batch	511236	**GCAL ID**	21307033101			1211182			1211183			
Prep Method	SW-846	**Sample Type**	SAMPLE			MS			MSD			
	3010A	**Prep Date**	07/08/2013 09:50			07/08/2013 09:50			07/08/2013 09:50			
		Analytical Date	07/08/2013 23:14			07/08/2013 23:22			07/08/2013 23:29			
		Matrix	Solid			Solid			Solid			
SW-846 1311/6010C			**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
			Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-38-2	Arsenic		0.0	0.025	0.50	0.48	97	75 - 125	0.51	102	6	20
7440-39-3	Barium		0.078	0.013	0.50	0.58	100	75 - 125	0.59	103	2	20
7440-43-9	Cadmium		0.0	0.0063	0.50	0.50	100	75 - 125	0.51	102	2	20
7440-47-3	Chromium		0.0057	0.013	0.50	0.53	105	75 - 125	0.54	107	2	20
7439-92-1	Lead		0.0	0.019	0.50	0.49	99	75 - 125	0.50	100	2	20
7782-49-2	Selenium		0.0	0.050	0.50	0.53	105	75 - 125	0.54	108	2	20
7440-22-4	Silver		0.0090	0.013	0.50	0.53	104	75 - 125	0.54	105	2	20

GCAL ANALYTICAL LABORATORIES, LLC

CHAIN OF CUSTODY RECORD

KEMRON/4794/2130103331/07.11.13

1 of 2

GCAL USE ONLY

7979 GSRI Ave., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Report to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd. Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
E-mail: tjordan@kemron.com

Bill to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd. Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
E-mail: tjordan@kemron.com

P.O. Number: SH0482
Project Name/Number: Trinity N&S / SH0482
Sampled By: Tomecia Riley

Analytical Requests & Method: TCLP RCRA Metals 1311/6010/7470

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 5.4 EDD

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	TCLP RCRA Metals 1311/6010/7470	Preservative
S	7/2/13	1245		X	0482-046	1	X	1
		1250		X	0482-047		X	2
		1253		X	0482-048		X	3
		1305		X	0482-049		X	4
		1311		X	0482-050		X	5
		1315		X	0482-051		X	6
		1318		X	0482-052		X	7
		1328		X	0482-053		X	8
		1335		X	0482-054		X	9
		1340		X	0482-055		X	10
		1341		X	0482-056		X	11
		1350		X	0482-057		X	12
		1354		X	0482-058		X	13

Air Bill No. ~~8026~~ ~~6051~~ ~~4472~~ 7961 4672 7250

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote) 7 days

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Tomecia Riley	7/2/13	1446			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[illegible]	07/03/13	1000	[illegible]	07/03/13	1000
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Note: DUE 7/12/13
Submit TCLP pH logs with results

By submitting these samples, you agree to GCAL's terms and

GCAL ANALYTICAL LABORATORIES, LLC

CHAIN OF CUSTODY RECORD

KEMRON|4794|21307033|07.11.13

2 of 2

GCAL USE ONLY

7979 GSRI Ave., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Report to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd. Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
E-mail: tjordan@kemron.com

Bill to:
Client: Kemron Environmental Services
Address: 1359-A Ellsworth Ind. Blvd. Atlanta, Ga. 30318
Contact: Tommy Jordan
Phone: 404-601-6908
E-mail: tjordan@kemron.com

P.O. Number: SH0482
Project Name/Number: Trinity N&S / SH0482
Sampled By: Tomecia Riley

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 5.4 E22

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Analytical Requests & Method

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	TCLP RCRA Metals 1311/6010/7470	Preservative
S	7/2/13	1355		X	0482 - 059	1	X	14
		1357		X	0482 - 060		X	15
		1407		X	0482 - 061		X	16
		1410		X	0482 - 062		X	17
		1412		X	0482 - 063		X	18
		1421		X	0482 - 064		X	19
		1422		X	0482 - 065		X	20

Air Bill No:

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote) 7 days

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Tomecia Riley	7/2/13	1446			
FEDEX	07/03/13	1020	[signature]	07/03/13	1020

Note: Due 7/12/13
Submit TCLP pH logs with results

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

SAMPLE RECEIVING CHECKLIST

213070331

SAMPLE DELIVERY GROUP	213070331
Client 4794 - KEMRON	**Transport Method** FEDEX
Profile Number 242849	**Received By** Law, Brittany P.
Line Item(s) 1 - RCRA Metals Soil	**Receive Date(s)** 07/03/13

CHECKLIST			
Were all samples received using proper thermal preservation?	☑ Yes	☐ No	☐ NA
When used, were all custody seals intact?	☑ Yes	☐ No	☐ NA
Were all samples received in proper containers?	☑ Yes	☐ No	☐ NA
Were all samples received using proper chemical preservation?	☑ Yes	☐ No	☐ NA
Was preservative added to any container at the lab?	☐ Yes	☑ No	☐ NA
Were all containers received in good condition?	☑ Yes	☐ No	☐ NA
Were all VOA vials received with no head space?	☐ Yes	☐ No	☑ NA
Do all sample labels match the Chain of Custody?	☑ Yes	☐ No	☐ NA
Did the Chain of Custody list the sampling technician?	☑ Yes	☐ No	☐ NA
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑ Yes	☐ No	☐ NA

COOLERS

Airbill	Temp(oC)
7961 4672 7256	5.4 (E22)

DISCREPANCIES

None

LABORATORY PRESERVATIONS

None

NOTES

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: GRA
DATE: 7/5/13

HBN: 511153
BATCH: 8053

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 21.3
Max. Temp °C: 26.5

Sample Number:	TBCK	21307033101	21307033102	21307033103
Sample Description		Dirt	Dirt	Dirt
Matrix Spike Required		~~N/A~~ NA	NA	NA
100% solid (Skip to 3)* (√)		✓	✓	✓
Sample is <100% (√)				
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)		7-9-13		
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)				
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96	96	96
Initial pH (After 5 min. mixing) "pH-1"		8.21	8.01	7.77
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓
Second pH "pH-2"		1.27	1.77	1.01
If pH-1 or pH-2 <5.0 use Fluid 1 (√)		✓	✓	✓
If pH-2 >5.0 use Fluid 11 (√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)	cdt 7/6/13			
Weight of Solids to be Extracted (X)	~~100.0~~	100.0	100.0	100.0
Filtrate Vessel Weight (multiphasic) (EV)				
Weight of Filtrate + Vessel (multiphasic) (EF)				
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	1700/ 900	1700/ 900	1700/ 900	1700/ 900
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:				
Volume Extract obtained in Step 5 (EF-EV)	500	500	500	500
Volume filtrate from Step 4 (L)				
pH of TCLP Extract (If two phase,record pH for each phase)		5.33	5.45	5.01

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-48-3 4.98
Ext. Fluid #2 pH/ID: NA
Balance ID: 1117331005

Rotator ID: 6,4,5
Rotation Start Date: 7/5/13
Rotation Stop Date: 7/6/13

Revision 005: 5/14/2013

Reviewer/Date: DT 7-9-13

GCAL

TCLP EXTRACTIONS

ANALYST: GPA
DATE: 7/16/13

HBN: 51153
BATCH: 8053

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 21.3
Max. Temp °C: 26.5

Sample Number:	2130703310 4	2130703310 5	2130703310 6	2130703310 7
Sample Description	Dirt	Dirt	Dirt	Dirt
Matrix Spike Required	NA	NA	NA	NA
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)				
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)				
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)	~~8.01~~ 96	~~1.52~~ 96	~~1.42~~ 96	~~1.33~~ 96
Initial pH (After 5 min. mixing) "pH-1"	✗ 8.07	1.52	1.42	1.33
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	1.21	1.76	1.11	1.02
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11 (√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)				
Weight of Solids to be Extracted (X)	100.1	100.0	100.0	100.2
Filtrate Vessel Weight (multiphasic) (EV)				
Weight of Filtrate + Vessel (multiphasic) (EF)				
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	1700 / 900	1700 / 900	1700 / 900	1700 / 900
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:				
Volume Extract obtained in Step 5 (EF-EV)	500	500	500	500
Volume filtrate from Step 4 (L)				
pH of TCLP Extract (If two phase,record pH for each phase)	4.98	4.99	5.01	5.55

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-48-3 4.98
Ext. Fluid #2 pH/ID: NA
Balance ID: 1117331005

Rotator ID: 6, 5, 4
Rotation Start Date: 7/15/13
Rotation Stop Date: 7/16/13

Revision 005: 5/14/2013

Reviewer/Date: 07-9-13

GCAL

TCLP EXTRACTIONS

ANALYST: GAA
DATE: 7/5/13

HBN: 511153
BATCH: 8053

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 21.3
Max. Temp °C: 26.5

Sample Number:		2130703308	2130703309	2130703310	2130703311
Sample Description		Dirt	Dirt	Dirt	Dirt
Matrix Spike Required		NA	NA	NA	NA
100% solid (Skip to 3)*	(√)	✓	✓	✓	✓
Sample is <100%	(√)				
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)				
Actual Weight of subsample (5.0± 0.1g)		5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)		96	96	96	96
Initial pH (After 5 min. mixing)	"pH-1"	8.01	7.45	7.22	7.51
√ If pH >5, if 3.5 mL 1N HCl added		✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes		✓	✓	✓	✓
Second pH	"pH-2"	1.87	1.05	1.03	2.01
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11	(√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)				
Weight of Solids to be Extracted	(X)	100.0	100.1	100.0	100.0
Filtrate Vessel Weight (multiphasic)	(EV)				
Weight of Filtrate + Vessel (multiphasic)	(EF)				
Amount of Fluid Needed = 20 x X		2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		1700/900	1700/900	1700/900	1700/900
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:					
Volume Extract obtained in Step 5 (EF-EV)		500	500	500	500
Volume filtrate from Step 4 (L)					
pH of TCLP Extract (If two phase,record pH for each phase)		5.42	5.37	5.01	5.62

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
, %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-48-3 4.98
Ext. Fluid #2 pH/ID: NA
Balance ID: 1117331005

Rotator ID: 4,5,4
Rotation Start Date: 7/5/13
Rotation Stop Date: 7/6/13

Revision 005: 5/14/2013

Reviewer/Date: DY 7-9-1

GCAL ANALYTICAL LABORATORIES, LLC

TCLP EXTRACTIONS

ANALYST: GPA
DATE: 7/5/13

HBN: 511153
BATCH: 8053

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 21.3
Max. Temp °C: 26.5

Sample Number:	2307033112	~~2307033113~~	2307033114	2307033115
Sample Description	Dirt	Dirt	Dirt	Dirt
Matrix Spike Required	NA	NA	NA	NA
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)				
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)				
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)	96	96	96	96
Initial pH (After 5 min. mixing) "pH-1"	7.76	7.05	7.91	7.63
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	1.02	1.15	1.40	1.27
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11 (√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)				
Weight of Solids to be Extracted (X)	100.0	100.0	100.0	100.1
Filtrate Vessel Weight (multiphasic) (EV)				
Weight of Filtrate + Vessel (multiphasic) (EF)				
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	1700/900	1700/900	1700/900	1700/900
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:				
Volume Extract obtained in Step 5 (EF-EV)	500	500	500	500
Volume filtrate from Step 4 (L)				
pH of TCLP Extract (If two phase,record pH for each phase)	6.01	5.21	4.99	5.17

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-48-3 4.98
Ext. Fluid #2 pH/ID: NA
Balance ID: 1117332005

Rotator ID: 6F,4
Rotation Start Date: 7/5/13
Rotation Stop Date: 7/6/13

Revision 005: 5/14/2013

Reviewer/Date: DT 7-9-13

GCAL

TCLP EXTRACTIONS

ANALYST: GAA
DATE: 7/5/13

HBN: 511153
BATCH: 8053

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 21.3
Max. Temp °C: 26.5

Sample Number:	2130703316	2130703317	2130703318	2130703319
Sample Description	Dirt	Dirt	Dirt	Dirt
Matrix Spike Required	NA	NA	NA	NA
100% solid (Skip to 3)* (√)	✓	✓	✓	✓
Sample is <100% (√)				
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)				
Filter Weight (F)				
Filtrate Vessel Weight (V)				
Subsample Weight (100 g minimum) (S)				
Weight of Liquid Phase (V+liquid)-V (L)				
Weight of Solid Phase (S-L) (SP)				
% Solids (SP/S) x 100 * (%S)				
%Dry Solids = [(Dried SP-F)/S] x 100* (%DS)				
2.EXTRACTION FLUID DETERMINATION				
Particle Size Reduced (app. 1mm) (√)				
Actual Weight of subsample (5.0± 0.1g)	5.0	5.0	5.0	5.0
Actual volume of water (96.5± 1mL)	96	96	96	96
Initial pH (After 5 min. mixing) "pH-1"	8.54	8.32	7.92	7.87
√ If pH >5, if 3.5 mL 1N HCl added	✓	✓	✓	✓
√ If heated and held at 50°C for 10 minutes	✓	✓	✓	✓
Second pH "pH-2"	1.55	1.23	1.87	0.92
If pH-1 or pH-2 <5.0 use Fluid 1 (√)	✓	✓	✓	✓
If pH-2 >5.0 use Fluid 11 (√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*				
Particle Size Reduced (95. mm max) (√)				
Weight of Solids to be Extracted (X)	100.0	100.2	100.0	100.0
Filtrate Vessel Weight (multiphasic) (EV)				
Weight of Filtrate + Vessel (multiphasic) (EF)				
Amount of Fluid Needed = 20 x X	2000	2000	2000	2000
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)				
Start Time/ Stop Time	1700/ 900	1700/ 900	1700/ 900	1700/900
5. FINAL TCLP EXTRACT				
If the phases will be analyzed separately, determine the volume of each phase:				
Volume Extract obtained in Step 5 (EF-EV)	500	500	500	500
Volume filtrate from Step 4 (L)				
pH of TCLP Extract (If two phase,record pH for each phase)	6.21	6.15	5.15	5.69

* If sample is <0.5 %S or <0.5 %DS; Filter sample , collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid.
%DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-48-3 4.98
Ext. Fluid #2 pH/ID: NA
Balance ID: 111733/805

Rotator ID: 4,5H
Rotation Start Date: 7/5/13
Rotation Stop Date: 7/6/13

Revision 005: 5/14/2013

Reviewer/Date: DT 7-9-13

TCLP EXTRACTIONS

GCAL

ANALYST: CPA
DATE: 7/5/13

HBN: 511153
BATCH: 8053

Temp. Controls: 23 ± 2 °C
Min. Temp °C: 21.3
Max. Temp °C: 26.5

Sample Number:		2307033120			
Sample Description		Dirt			
Matrix Spike Required		NA			
100% solid (Skip to 3)*	(√)	✓			
Sample is <100%	(√)				
1. FILTRATION (Pressure Filtration is Required if Solids are ≥ 10%)					
Filter Weight	(F)				
Filtrate Vessel Weight	(V)				
Subsample Weight (100 g minimum)	(S)				
Weight of Liquid Phase (V+liquid)-V	(L)				
Weight of Solid Phase (S-L)	(SP)				
% Solids (SP/S) x 100 *	(%S)				
%Dry Solids = [(Dried SP-F)/S] x 100*	(%DS)				
2.EXTRACTION FLUID DETERMINATION					
Particle Size Reduced (app. 1mm)	(√)				
Actual Weight of subsample (5.0± 0.1g)		5.0			
Actual volume of water (96.5± 1mL)		96			
Initial pH (After 5 min. mixing)	"pH-1"	8.93			
√ If pH >5, if 3.5 mL 1N HCl added		✓			
√ If heated and held at 50°C for 10 minutes					
Second pH	"pH-2"	1.76			
If pH-1 or pH-2 <5.0 use Fluid 1	(√)	✓			
If pH-2 >5.0 use Fluid 11	(√)				
3. PREPARATION FOR EXTRACTION PROCEDURE*					
Particle Size Reduced (95. mm max)	(√)				
Weight of Solids to be Extracted	(X)	100.10			
Filtrate Vessel Weight (multiphasic)	(EV)				
Weight of Filtrate + Vessel (multiphasic)	(EF)				
Amount of Fluid Needed = 20 x X		2000			
4. TCLP ROTATION (Rotate for 18 ± 2 hours at 23 ± 2°C and 30 ± 2 rpm)					
Start Time/ Stop Time		1700/900			
5. FINAL TCLP EXTRACT					
If the phases will be analyzed separately, determine the volume of each phase:					
Volume Extract obtained in Step 5 (EF-EV)		500			
Volume filtrate from Step 4 (L)					
pH of TCLP Extract (If two phase,record pH for each phase)		6.01			

* If sample is <0.5 %S or <0.5 %DS; Filter sample, collect filtrate and skip to 6. If sample is 100% solid, use 100 grams sample and 2000mLs fluid. %DS is only performed if it is suspected that after drying, the %S will be <0.5%.

Ext. Fluid #1 pH/ID: 552-48-3 4.98
Ext. Fluid #2 pH/ID: NA
Balance ID: 1117331005

Rotator ID: 6,5,4
Rotation Start Date: 7/5/13
Rotation Stop Date: 7/6/13

Revision 005: 5/14/2013

Reviewer/Date: DJ 7-9-13