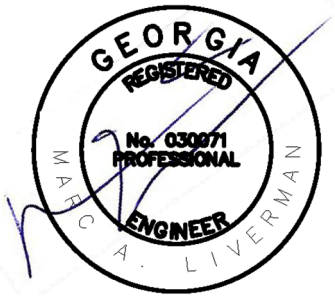
WASTE MANAGEMENT OF NORTH FLORIDA, INC.

367 CHESSER ISLAND ROAD | FOLKSTON, GEORGIA 31537



CHESSER ISLAND ROAD MSW LANDFILL
COAL COMBUSTION RESIDUALS (CCR)
MANAGEMENT PLAN ANNUAL UPDATE
PERMIT #: 024-006D(SL)

ANNUAL CCR MANAGEMENT PLAN AND DUST CONTROL REPORT

ATLANTIC COAST CONSULTING, INC.

March 2023

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This CCR management and fugitive dust report was prepared in accordance with OCGA Solid Waste Management Rule 391-3-4-.07(5) and the Annual Coal Combustion Residuals (CCR) Management Plan and Dust Control Report Guidance Document provided by Georgia Department of Natural Resources, Environmental Protection Division (EPD) dated May 2018.

SUMMARY:

The Chesser Island Municipal Solid Waste (MSW) Landfill is comprised of an active Municipal Solid Waste (MSW) Landfill (LF) unit that is separated in two phases and a closed MSWLF unit that also contains two phases. The closed areas are known as Phase 1 and Phase 2 while the active portions are Phase 3 and Phase 4. The facilities current CCR Management Plan was originally established through a minor modification approved by Georgia's Environmental Protection Division (EPD) on May 19, 2017. This plan was subsequently modified through two additional minor modifications approved by GA EPD on February 21, 2020 and October 8, 2021.

FACILITY LOCATION AND DESCRIPTION:

The existing landfill is located west of the intersection of Hwy 23 and Willie Dixon Road south of Folkston, GA near the Georgia-Florida border. The facility is comprised of two active MSWLF phases known as Phases 3 and 4. Phases 1 and 2 were closed in 2005. In 2010, Phase 4 was expanded to the west of Phase 3 to form a contiguous 243 acre MSW landfill on the southern portion of the property.

CCR MANAGEMENT ACTIVITIES:

CCR and Non-CCR Waste Volumes:

Chesser Island MSWLF currently receives CCR and non-CCR waste materials. The non-CCR waste materials may contain waste streams from municipal, industrial, commercial, and other special waste stream sources. All waste streams accepted at this facility are in accordance with OCGA Solid Waste Management Rule 391-3-4.

Section 1 of the current Operational Narrative shown on Sheet 26 of the Design and Operation (D&O) Plans defines the maximum allowable tonnage of CCR per stage. The facility is currently permitted to receive CCR tonnages equal to or less than these defined maximum allowable tonnages. The CCR and corresponding non-CCR waste estimates in each stage were established by verifying that the facilities design is capable of withstanding the additional loads presented by the higher density CCR material. The basis of the design provided in the October 8, 2021 CCR Management Minor Modification was an overall waste mass density of 80.7 lb/CF (2,179 lb/CY). This density takes into account the elevated waste mass density with the introduction of the permitted upper limit of CCR into the waste stream.

The CCR material received at this facility between January 1, 2022 and December 31, 2022 had a total recorded weight of 597,147 tons. During this same period, the facility received 857,783 tons of non-CCR waste. The CCR and Non-CCR tonnages received in each stage

during this reporting period along with the cumulative CCR to Non-CCR ratios for each stage are summarized in Table 1 in Appendix A. An isopach representing the depth of waste placed in each stage during this reporting period and a delineation of the disposal limits of the CCR and Non-CCR wastes are shown on Figure 1 in Appendix A. The cumulative total tonnage of CCR placed during this period and in-place CCR does not exceed the maximum allowable tonnage established by the Operational Narrative in any stage. Therefore, no adjustments are needed to the plan or design components related to stability, leachate collection or base grade settlement.

The maximum amount of CCR received on any given day between January 1, 2022 and December 31, 2022 was 3,484 tons. This recorded total is less than the estimated maximum daily weight of 6,000 tons shown in Section 1 of the Operational Narrative. Therefore, no adjustments are needed to the plan or design components related to stability, leachate collection or base grade settlement.

CCR Source:

All CCR waste received at the facility was sourced from Southern Company (Brunswick), Keystone Terminal, and WestRock as identified in Section 3 of the facilities Operational Narrative on Sheet 26 of the current Design and Operation Plan.

CCR Characterization and Compatibility:

Section 3 of the Operational Narrative on Sheet 26 requires all CCR waste streams entering the facility be tested for compatibility using the Toxicity Characteristic Leaching Procedure (TCLP) 8 RCRA Metals by SW-846 Method 1311 and a Paint Filter Test by SW-845 Method 9095. The material sources and general physical characteristics have remained consistent with those indicated in the approved CCR Management Plan and the customers have not notified the facility of any significant process changes. Therefore, additional testing to verify characterization and compatibility have not been necessary.

CCR Placement, Compaction and Cover

The facility is permitted to operate two independent working faces, each with a maximum area of 40,000 square feet. This facility is allowed to co-mingle non-CCR and CCR wastes at the same working face or to place CCR in 'block filled' fashion (CCR only layers) at a separate working face located at least 100 feet from the primary working face. The maximum area of the working face(s) and their management were conducted in accordance with Section 2 of the Operational Narrative on Sheet 26.

During the 2022 calendar year, CCR waste received at the facility was placed in individual CCR only lifts or 'block filled' in Stages 3, 4, 5, 6A, 6B, 7A South, and 7A North. Procedures for controlled unloading, placement, and compaction of CCR waste were conducted in accordance with the approved CCR Management Plan. As required in Section 5 of the Operational Narrative on Sheet 26 of the Design and Operation Plan, a test pad area was established to determine placement and compaction requirements necessary to obtain a

minimum compaction of 90% standard proctor for CCR only waste lifts. Due to the consistent physical nature of the CCR material and sourcing, the original test pad results have been used to guide placement and compaction efforts to date.

No CCR and non-CCR wastes were co-mingled during this reporting period.

No leachate outbreaks were observed in layers of waste containing CCR wastes.

Additionally, none of the previously placed CCR material was harvested for beneficial re-use and none of the CCR material was utilized in the facilities solidification process.

Record Keeping:

Records of all waste transported to the site along with daily logs and operational records are retained at the facilities site office building. All record keeping is in accordance with the Georgia Rules for Solid Waste Management 391-3-4-.07(3)(u).

Fugitive Dust Control:

Wastes are transported on trucks with covers to prevent the escape of dust during transport. Only hydrated CCR material was accepted at the facility. The operators at the facility spread and compacted CCR material as it was received. The onsite water truck is used to control dust site-wide and was used on CCR material if additional dust control was needed. The facility did not receive any complaints related to dust between January 1, 2022 and December 31, 2022 and has remained compliant with requirements established by Air Quality Rule 391-3-1-.02(2)(n)1.

Leachate Collection and Removal System:

The facilities leachate collection, removal, and storage system is in good working order with no known issues related to the disposal of co-mingled CCR/non-CCR wastes or 'block filled' CCR materials.

Stormwater Management System:

The working face(s) were managed to ensure that surface water contacting CCR and non-CCR waste was not discharged into the stormwater management system. This was accomplished by placing and compacting material away from the side slopes, using soil diversion berms near side slopes, use of silt fence and haybale features, and/or by sloping the working face into the waste mass.

Environmental Monitoring:

The environmental monitoring program for the facility was modified during development of the CCR Management Plan to include appropriate Appendix III/IV analytical parameters in accordance with United States Environmental Protection Agency recommendations and

Georgia Environmental Protection Division Regulations. The monitoring network (consisting of groundwater wells, surface water and leachate monitoring points) and extended parameter list, based on data collected to date, remains suitable for detection of CCR related constituents. The facility will continue implementing the CCR monitoring program and documenting results to EPD in semi-annual monitoring reports.

Emergencies:

The facility did not experience any events or circumstances that represented an operational or environmental emergency during this reporting period.

Documentation of Notification to Local Governments:

The operation of CCR disposal activities during this reporting period have been in compliance with the currently approved CCR Management Plans. Therefore, no plan modifications or local government notifications are required at this time.

CONCLUSION:

The current CCR Management routines required by the facilities Design and Operation Plan have proven to be effective in governing the proper handling and placement of CCR material as required by OCGA's Solid Waste Management Rule 391-3-4-.07(5) and the Guidance Document for Coal Combustion Residuals (CCR) Management Plans dated December 22, 2016. Therefore, the facilities operational protocols will remain unchanged until such time as they may need to be amended in accordance with the requirements of its CCR Management Plan.

Appendix A

CCR Tonnage Data

IN THIS APPENDIX:

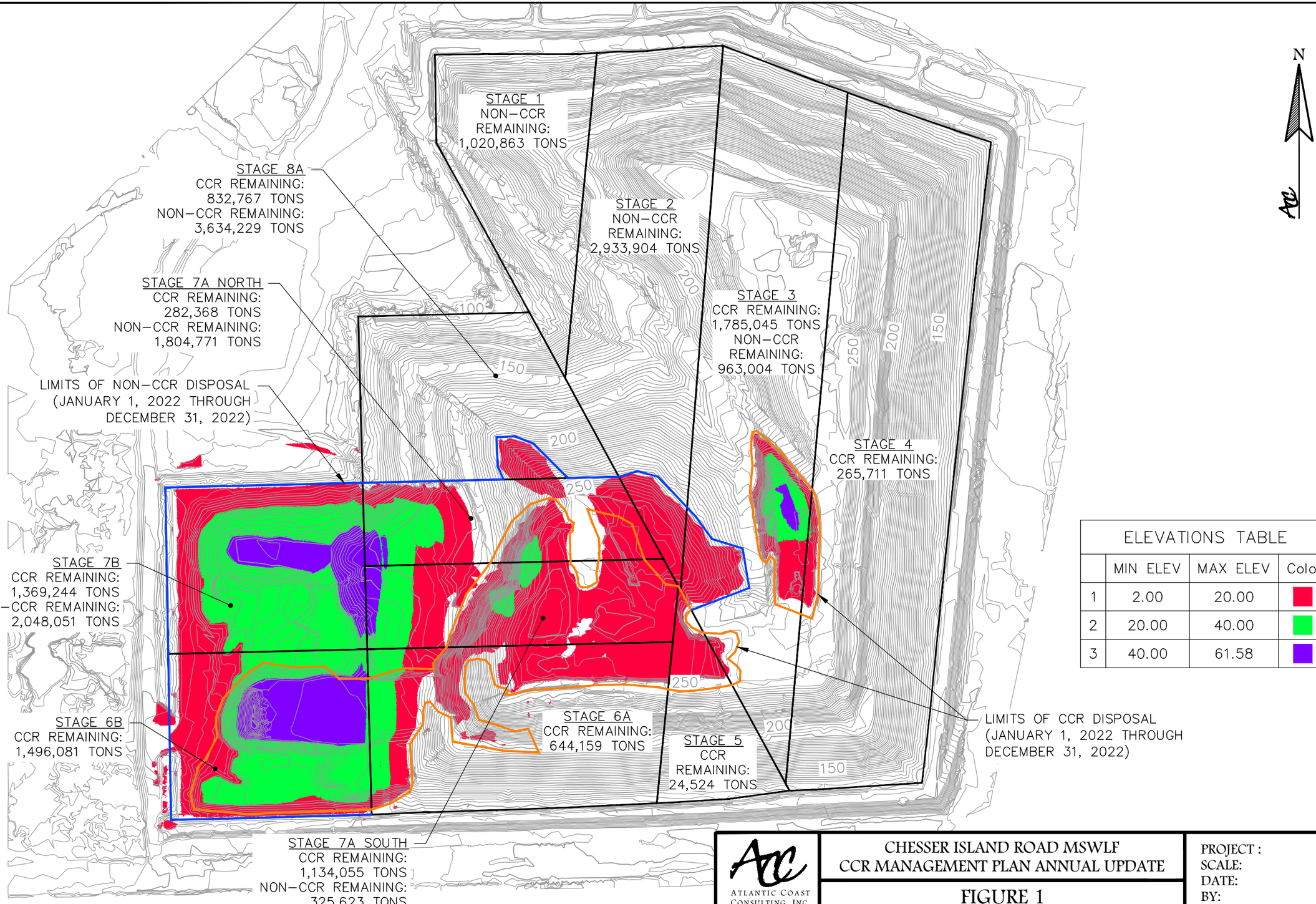
- Table 1 - 2022 CCR and Non-CCR Tonnage Summary
- Figure 1 – 2022 Isopach and Remaining Tonnages

Table 1 - 2022 CCR and Non-CCR Tonnage Summary

			2022									
Stage #	Max Allowable CCR Weight (tons)	Corresponding Non-CCR Weight (tons)	CCR Weight (tons)	Non-CCR Weight (tons)	Estimated Daily and Intermediate Cover[1] (tons)	CCR to Non-CCR Ratio[2]	Cumulative CCR In-Place (tons)[3]	Cumulative Non-CCR In-Place (tons)[3]	Cumulative Cover In-Place[1] (tons)	Cumulative CCR to Non-CCR Ratio[2]	CCR Remaining (tons)	Non-CCR Remaining (tons)
Stage 1	276,135	1,334,870	0	0	0	-	276,135	314,007	169,310	1:1.14	0	1,020,863
Stage 2	887,668	4,160,615	0	18,908	2,031	0:1	887,668	1,226,710	567,374	1:1.38	0	2,933,904
Stage 3	3,687,680	3,053,277	88,748	13,614	1,463	1:0.15	1,919,635	2,090,273	1,058,634	1:1.09	1,768,045	963,004
Stage 4	1,809,982	1,731,022	4,857	0	0	1:0	1,544,272	1,731,022	933,351	1:1.12	265,711	0
Stage 5	297,746	266,464	14,414	0	0	1:0	273,222	268,566	143,898	1:0.98	24,524	0
Stage 6A	1,541,723	726,643	115,501	16,426	1,765	1:0.14	897,564	743,069	393,564	1:0.83	644,159	0
Stage 6B	1,712,694	94,452	216,613	244,578	26,276	0:1.13	216,613	244,578	26,276	1:1.13	1,496,081	0
Stage 6C	1,771,386	125,581	0	0	0	-	0	0	0	-	1,771,386	125,581
Stage 7A N	318,069	2,557,840	35,701	95,064	10,213	1:2.66	35,701	753,070	173,691	1:21.09	282,368	1,804,771
Stage 7A S	1,872,462	1,008,919	121,314	78,328	8,415	1:0.65	738,407	683,296	264,866	1:0.93	1,134,055	325,623
Stage 7B	1,369,244	2,433,240	0	385,189	41,382	0:1	0	385,189	41,382	0:1	1,369,244	2,048,051
Stage 7C	2,909,009	324,483	0	0	0	-	0	0	0	-	2,909,009	324,483
Stage 8A	832,767	4,175,167	0	5,677	610	0:1	0	540,939	163,728	0:1	832,767	3,634,229
Stage 8B	1,626,223	2,889,910	0	0	0	-	0	0	0	-	1,626,223	2,889,910
Stage 8C	2,613,773	249,298	0	0	0	-	0	0	0	-	2,613,773	249,298
Stage 9	716,408	1,273,106	0	0	0	-	0	0	0	-	716,408	1,273,106
Stage 10A	1,121,989	1,993,852	0	0	0	-	0	0	0	-	1,121,989	1,993,852
Stage 10B	692,993	1,231,496	0	0	0	-	0	0	0	-	692,993	1,231,496
Total (Tons)	26,057,950	29,630,234	597,147	857,783	92,155		6,789,215	8,980,718	3,936,075		19,268,735	20,818,170
Total (CY)	20,008,363	35,877,064	438,318	891,206	56,886		5,123,966	10,567,769	2,429,676			

Notes:

1. The daily and intermediate cover tonnage estimated for this reporting period is based on the assumption that approximately 6% of the gross Non-CCR waste volume was comprised of daily and intermediate cover and that tarps and/or other alternate daily cover materials were used for CCR wastes in accordance with Section 6 on Sheet 26 of the approved D&O Plan. The cumulative total cover in-place assumes that, prior to the 2021 reporting period, daily and intermediate cover soils comprised approximately 15% of the gross CCR and Non-CCR waste volumes.
2. See Note 4 in Section 1 of the Operational Narrative on Sheet 26 of the approved D&O Plan.
3. The cumulative total Non-CCR tonnages in Stages 5, 6A, and 6B exceed the Non-CCR tons listed in the Operational Narrative on Sheet 26 of the approved D&O Plan. However, the cumulative total CCR tonnage within each stage does not exceed the permitted maximum allowable tons listed on the D&O Plan as specified in Note 2 of Section 1 on Sheet 26. Additionally, the cumulative total volume for net waste plus daily and intermediate cover does not exceed the gross waste volume as specified in Note 1 of Section 1 on Sheet 26 of the approved D&O Plan.



ELEVATIONS TABLE			
	MIN ELEV	MAX ELEV	Color
1	2.00	20.00	
2	20.00	40.00	
3	40.00	61.58	

ATLANTIC COAST CONSULTING, INC.
770-594-5998
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Roswell, GA
Savannah, GA
Knoxville, TN

CHESSER ISLAND ROAD MSWLF
CCR MANAGEMENT PLAN ANNUAL UPDATE

FIGURE 1
2022 ISOPACH AND REMAINING TONNAGES

PROJECT :	I002-426
SCALE:	1"=350'
DATE:	03/29/23
BY:	JLY

P: \Industrial\I002-WM Atlanta\426-CCR Update\2023\WM North FL\3-Design Data\2-DWGs\2022 Tonnage Figure.dwg 3/29/23 JOSH YOUNG

CCR Compatibility and Characterization

IN THIS APPENDIX:

- Southern Company, Keystone Terminal, and WestRock CCR Analytical Reports
- Test Pad Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-138279-1
Client Project/Site: Superior Landfill Waste Char.

For:
Waste Management
1809 West Highway 80
Garden City, Georgia 31408

Attn: Ms. Sarah Rafalowski

Kathryn Smith

Authorized for release by:
5/18/2017 12:54:49 PM

Kathryn Smith, Manager of Project Management
(912)354-7858
kathy.smith@testamericainc.com

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Sample Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-138279-1	Ash-Kraft	Solid	05/02/17 14:55	05/03/17 08:54
680-138279-2	Ash-Grumman	Solid	05/02/17 14:35	05/03/17 08:54

Job ID: 680-138279-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Waste Management
Project: Superior Landfill Waste Char.

Report Number: 680-138279-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 05/03/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

TCLP VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for TCLP volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8260B. The samples were leached on 05/11/2017 and analyzed on 05/14/2017.

4-Bromofluorobenzene (Surr) recovered low for LCSD 680-479788/4.

Samples Ash-Kraft (680-138279-1)[20X] and Ash-Grumman (680-138279-2)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for TCLP semivolatile organic compounds (GC-MS) in accordance with EPA SW846 Methods 1311 / 8270D. The samples were leached on 05/11/2017, prepared on 05/15/2017 and analyzed on 05/17/2017.

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

METALS (ICP) - TCLP
Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for Metals (ICP) - TCLP in accordance with EPA SW-846 Methods 1311/6010C. The samples were leached on 05/11/2017, and prepared and analyzed on 05/12/2017.

Barium recovered high for the MS of sample Ash-Kraft (680-138279-1) in batch 680-479888.

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

MERCURY - TCLP
Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for mercury - TCLP in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 05/11/2017, prepared on 05/12/2017 and analyzed on 05/15/2017.

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

IGNITABILITY FOR SOLIDS
Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for ignitability for solids in accordance with EPA SW-846 Method 1030. The samples were analyzed on 05/10/2017.

The following sample did not ignite: Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2); therefore, an ignitability value could not

Job ID: 680-138279-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

be obtained. The result has been reported as "No Burn" (NB).

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

REACTIVE CYANIDE

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for reactive cyanide in accordance with EPA SW-846 Method 9014. The samples were prepared on 05/08/2017 and analyzed on 05/09/2017.

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

REACTIVE SULFIDE

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for reactive sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared on 05/08/2017 and analyzed on 05/09/2017.

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

CORROSIVITY (PH)

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045D. The samples were analyzed on 05/11/2017.

This analysis is considered a field test and is to be performed within 15 minutes of collection. This analysis was performed in the laboratory outside the 15 minute timeframe.

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

GRAIN SIZE

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for grain size in accordance with ASTM D422. The samples were analyzed on 05/04/2017.

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

Client Sample ID: Ash-Kraft

Date Collected: 05/02/17 14:55
Date Received: 05/03/17 08:54

Lab Sample ID: 680-138279-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020		mg/L			05/14/17 20:15	20
2-Butanone (MEK)	<0.20		0.20		mg/L			05/14/17 20:15	20
Carbon tetrachloride	<0.020		0.020		mg/L			05/14/17 20:15	20
Chlorobenzene	<0.020		0.020		mg/L			05/14/17 20:15	20
Chloroform	<0.020		0.020		mg/L			05/14/17 20:15	20
1,2-Dichloroethane	<0.020		0.020		mg/L			05/14/17 20:15	20
1,1-Dichloroethene	<0.020		0.020		mg/L			05/14/17 20:15	20
Tetrachloroethene	<0.020		0.020		mg/L			05/14/17 20:15	20
Trichloroethene	<0.020		0.020		mg/L			05/14/17 20:15	20
Vinyl chloride	<0.020		0.020		mg/L			05/14/17 20:15	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*80 - 120*		*05/14/17 20:15*	*20*
Dibromofluoromethane (Surr)	*96*		*80 - 122*		*05/14/17 20:15*	*20*
1,2-Dichloroethane-d4 (Surr)	*86*		*73 - 131*		*05/14/17 20:15*	*20*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/14/17 20:15*	*20*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
2,4-Dinitrotoluene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
Hexachlorobenzene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
Hexachlorobutadiene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
Hexachloroethane	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
2-Methylphenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
3 & 4 Methylphenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
Nitrobenzene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
Pentachlorophenol	<0.25		0.25		mg/L		05/15/17 16:52	05/17/17 19:27	1
Pyridine	<0.25		0.25		mg/L		05/15/17 16:52	05/17/17 19:27	1
2,4,5-Trichlorophenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1
2,4,6-Trichlorophenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*38 - 130*	*05/15/17 16:52*	*05/17/17 19:27*	*1*
2-Fluorophenol (Surr)	*66*		*25 - 130*	*05/15/17 16:52*	*05/17/17 19:27*	*1*
Nitrobenzene-d5 (Surr)	*85*		*39 - 130*	*05/15/17 16:52*	*05/17/17 19:27*	*1*
Phenol-d5 (Surr)	*70*		*25 - 130*	*05/15/17 16:52*	*05/17/17 19:27*	*1*
Terphenyl-d14 (Surr)	*83*		*10 - 143*	*05/15/17 16:52*	*05/17/17 19:27*	*1*
2,4,6-Tribromophenol (Surr)	*101*		*31 - 141*	*05/15/17 16:52*	*05/17/17 19:27*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20		0.20		mg/L		05/12/17 12:11	05/12/17 19:13	1
Barium	<1.0	F1	1.0		mg/L		05/12/17 12:11	05/12/17 19:13	1
Cadmium	<0.10		0.10		mg/L		05/12/17 12:11	05/12/17 19:13	1
Chromium	<0.20		0.20		mg/L		05/12/17 12:11	05/12/17 19:13	1
Lead	<0.20		0.20		mg/L		05/12/17 12:11	05/12/17 19:13	1
Selenium	<0.50		0.50		mg/L		05/12/17 12:11	05/12/17 19:13	1
Silver	<0.10		0.10		mg/L		05/12/17 12:11	05/12/17 19:13	1

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Kraft

Lab Sample ID: 680-138279-1

Date Collected: 05/02/17 14:55

Matrix: Solid

Date Received: 05/03/17 08:54

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020		mg/L		05/12/17 14:02	05/15/17 11:18	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**NB**				mm/sec			05/10/17 08:38	1
Cyanide, Reactive	<0.25		0.25		mg/Kg		05/08/17 14:03	05/09/17 14:45	1
Sulfide, Reactive	<150		150		mg/Kg		05/08/17 14:03	05/09/17 12:02	1
pH	**6.0**	**HF**			SU			05/11/17 15:19	1

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**2.7**				%			05/04/17 18:54	1
Sieve Size 3 inch - Percent Finer	**100.0**				% Passing			05/04/17 18:54	1
Sand	**57.2**				%			05/04/17 18:54	1
Sieve Size 2 inch - Percent Finer	**100.0**				% Passing			05/04/17 18:54	1
Coarse Sand	**4.1**				%			05/04/17 18:54	1
Sieve Size 1.5 inch - Percent Finer	**100.0**				% Passing			05/04/17 18:54	1
Medium Sand	**17.0**				%			05/04/17 18:54	1
Sieve Size 1 inch - Percent Finer	**100.0**				% Passing			05/04/17 18:54	1
Fine Sand	**36.1**				%			05/04/17 18:54	1
Sieve Size 0.75 inch - Percent Finer	**100.0**				% Passing			05/04/17 18:54	1
Fines	**40.1**				%			05/04/17 18:54	1
Sieve Size 0.375 inch - Percent Finer	**100.0**				% Passing			05/04/17 18:54	1
Sieve Size #4 - Percent Finer	**97.3**				% Passing			05/04/17 18:54	1
Sieve Size #10 - Percent Finer	**93.2**				% Passing			05/04/17 18:54	1
Sieve Size #20 - Percent Finer	**86.0**				% Passing			05/04/17 18:54	1
Sieve Size #40 - Percent Finer	**76.2**				% Passing			05/04/17 18:54	1
Sieve Size #60 - Percent Finer	**66.3**				% Passing			05/04/17 18:54	1
Sieve Size #80 - Percent Finer	**60.1**				% Passing			05/04/17 18:54	1
Sieve Size #100 - Percent Finer	**55.4**				% Passing			05/04/17 18:54	1
Sieve Size #200 - Percent Finer	**40.1**				% Passing			05/04/17 18:54	1

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020		mg/L			05/14/17 20:40	20
2-Butanone (MEK)	<0.20		0.20		mg/L			05/14/17 20:40	20
Carbon tetrachloride	<0.020		0.020		mg/L			05/14/17 20:40	20
Chlorobenzene	<0.020		0.020		mg/L			05/14/17 20:40	20
Chloroform	<0.020		0.020		mg/L			05/14/17 20:40	20
1,2-Dichloroethane	<0.020		0.020		mg/L			05/14/17 20:40	20
1,1-Dichloroethene	<0.020		0.020		mg/L			05/14/17 20:40	20
Tetrachloroethene	<0.020		0.020		mg/L			05/14/17 20:40	20
Trichloroethene	<0.020		0.020		mg/L			05/14/17 20:40	20
Vinyl chloride	<0.020		0.020		mg/L			05/14/17 20:40	20

Client Sample ID: Ash-Grumman

Date Collected: 05/02/17 14:35
Date Received: 05/03/17 08:54

Lab Sample ID: 680-138279-2

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*80 - 120*		*05/14/17 20:40*	*20*
Dibromofluoromethane (Surr)	*96*		*80 - 122*		*05/14/17 20:40*	*20*
1,2-Dichloroethane-d4 (Surr)	*87*		*73 - 131*		*05/14/17 20:40*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/14/17 20:40*	*20*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
2,4-Dinitrotoluene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Hexachlorobenzene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Hexachlorobutadiene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Hexachloroethane	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
2-Methylphenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
3 & 4 Methylphenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Nitrobenzene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Pentachlorophenol	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 19:51	1
Pyridine	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 19:51	1
2,4,5-Trichlorophenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
2,4,6-Trichlorophenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*38 - 130*	*05/15/17 16:52*	*05/17/17 19:51*	*1*
2-Fluorophenol (Surr)	*57*		*25 - 130*	*05/15/17 16:52*	*05/17/17 19:51*	*1*
Nitrobenzene-d5 (Surr)	*73*		*39 - 130*	*05/15/17 16:52*	*05/17/17 19:51*	*1*
Phenol-d5 (Surr)	*59*		*25 - 130*	*05/15/17 16:52*	*05/17/17 19:51*	*1*
Terphenyl-d14 (Surr)	*69*		*10 - 143*	*05/15/17 16:52*	*05/17/17 19:51*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*31 - 141*	*05/15/17 16:52*	*05/17/17 19:51*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:37	1
Barium	**5.7**		1.0	mg/L		05/12/17 12:11	05/12/17 19:37	1
Cadmium	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:37	1
Chromium	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:37	1
Lead	**0.37**		0.20	mg/L		05/12/17 12:11	05/12/17 19:37	1
Selenium	<0.50		0.50	mg/L		05/12/17 12:11	05/12/17 19:37	1
Silver	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:37	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/L		05/12/17 14:02	05/15/17 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**NB**			mm/sec			05/10/17 08:38	1
Cyanide, Reactive	<0.25		0.25	mg/Kg		05/08/17 15:20	05/09/17 14:45	1
Sulfide, Reactive	<150		150	mg/Kg		05/08/17 15:20	05/09/17 12:02	1
pH	**8.0**	**HF**		SU			05/11/17 15:19	1

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Grumman
Date Collected: 05/02/17 14:35
Date Received: 05/03/17 08:54

Lab Sample ID: 680-138279-2
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.7				%			05/04/17 18:57	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/04/17 18:57	1
Sand	57.8				%			05/04/17 18:57	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/04/17 18:57	1
Coarse Sand	1.8				%			05/04/17 18:57	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/04/17 18:57	1
Medium Sand	15.3				%			05/04/17 18:57	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/04/17 18:57	1
Fine Sand	40.7				%			05/04/17 18:57	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/04/17 18:57	1
Fines	41.5				%			05/04/17 18:57	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			05/04/17 18:57	1
Sieve Size #4 - Percent Finer	99.3				% Passing			05/04/17 18:57	1
Sieve Size #10 - Percent Finer	97.5				% Passing			05/04/17 18:57	1
Sieve Size #20 - Percent Finer	94.1				% Passing			05/04/17 18:57	1
Sieve Size #40 - Percent Finer	82.2				% Passing			05/04/17 18:57	1
Sieve Size #60 - Percent Finer	70.4				% Passing			05/04/17 18:57	1
Sieve Size #80 - Percent Finer	63.4				% Passing			05/04/17 18:57	1
Sieve Size #100 - Percent Finer	57.4				% Passing			05/04/17 18:57	1
Sieve Size #200 - Percent Finer	41.5				% Passing			05/04/17 18:57	1

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

Lab Sample ID: MB 680-479788/8
Matrix: Solid
Analysis Batch: 479788

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/L			05/14/17 14:42	1
2-Butanone (MEK)	<0.010		0.010		mg/L			05/14/17 14:42	1
Carbon tetrachloride	<0.0010		0.0010		mg/L			05/14/17 14:42	1
Chlorobenzene	<0.0010		0.0010		mg/L			05/14/17 14:42	1
Chloroform	<0.0010		0.0010		mg/L			05/14/17 14:42	1
1,2-Dichloroethane	<0.0010		0.0010		mg/L			05/14/17 14:42	1
1,1-Dichloroethene	<0.0010		0.0010		mg/L			05/14/17 14:42	1
Tetrachloroethene	<0.0010		0.0010		mg/L			05/14/17 14:42	1
Trichloroethene	<0.0010		0.0010		mg/L			05/14/17 14:42	1
Vinyl chloride	<0.0010		0.0010		mg/L			05/14/17 14:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*80 - 120*		*05/14/17 14:42*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 122*		*05/14/17 14:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*73 - 131*		*05/14/17 14:42*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/14/17 14:42*	*1*

Lab Sample ID: LCS 680-479788/3
Matrix: Solid
Analysis Batch: 479788

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0486		mg/L		97	80 - 120		
2-Butanone (MEK)			0.250	0.212		mg/L		85	79 - 125		
Carbon tetrachloride			0.0500	0.0475		mg/L		95	67 - 125		
Chlorobenzene			0.0500	0.0492		mg/L		98	80 - 120		
Chloroform			0.0500	0.0454		mg/L		91	80 - 120		
1,2-Dichloroethane			0.0500	0.0445		mg/L		89	72 - 128		
1,1-Dichloroethene			0.0500	0.0459		mg/L		92	80 - 120		
Tetrachloroethene			0.0500	0.0490		mg/L		98	71 - 123		
Trichloroethene			0.0500	0.0485		mg/L		97	80 - 120		
Vinyl chloride			0.0500	0.0498		mg/L		100	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 122*
1,2-Dichloroethane-d4 (Surr)	*85*		*73 - 131*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: LCSD 680-479788/4
Matrix: Solid
Analysis Batch: 479788

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.0479		mg/L		96	80 - 120	1	20
2-Butanone (MEK)			0.250	0.210		mg/L		84	79 - 125	1	20
Carbon tetrachloride			0.0500	0.0480		mg/L		96	67 - 125	1	20

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

Lab Sample ID: LCSD 680-479788/4
Matrix: Solid
Analysis Batch: 479788

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene			0.0500	0.0498		mg/L		100	80 - 120	1	20
Chloroform			0.0500	0.0446		mg/L		89	80 - 120	2	20
1,2-Dichloroethane			0.0500	0.0436		mg/L		87	72 - 128	2	50
1,1-Dichloroethene			0.0500	0.0441		mg/L		88	80 - 120	4	20
Tetrachloroethene			0.0500	0.0495		mg/L		99	71 - 123	1	20
Trichloroethene			0.0500	0.0479		mg/L		96	80 - 120	1	20
Vinyl chloride			0.0500	0.0488		mg/L		98	80 - 129	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*79*	*X*	*80 - 120*
Dibromofluoromethane (Surr)	*94*		*80 - 122*
1,2-Dichloroethane-d4 (Surr)	*83*		*73 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LB 680-479494/1-A
Matrix: Solid
Analysis Batch: 479788

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020		mg/L			05/14/17 16:24	20
2-Butanone (MEK)	<0.20		0.20		mg/L			05/14/17 16:24	20
Carbon tetrachloride	<0.020		0.020		mg/L			05/14/17 16:24	20
Chlorobenzene	<0.020		0.020		mg/L			05/14/17 16:24	20
Chloroform	<0.020		0.020		mg/L			05/14/17 16:24	20
1,2-Dichloroethane	<0.020		0.020		mg/L			05/14/17 16:24	20
1,1-Dichloroethene	<0.020		0.020		mg/L			05/14/17 16:24	20
Tetrachloroethene	<0.020		0.020		mg/L			05/14/17 16:24	20
Trichloroethene	<0.020		0.020		mg/L			05/14/17 16:24	20
Vinyl chloride	<0.020		0.020		mg/L			05/14/17 16:24	20

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*80 - 120*		*05/14/17 16:24*	*20*
Dibromofluoromethane (Surr)	*99*		*80 - 122*		*05/14/17 16:24*	*20*
1,2-Dichloroethane-d4 (Surr)	*87*		*73 - 131*		*05/14/17 16:24*	*20*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/14/17 16:24*	*20*

Lab Sample ID: 680-138279-2 MS
Matrix: Solid
Analysis Batch: 479788

Client Sample ID: Ash-Grumman
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.020		1.00	1.00		mg/L		100	80 - 120		
2-Butanone (MEK)	<0.20		5.00	4.32		mg/L		86	79 - 125		
Carbon tetrachloride	<0.020		1.00	1.03		mg/L		103	67 - 125		
Chlorobenzene	<0.020		1.00	1.03		mg/L		103	80 - 120		
Chloroform	<0.020		1.00	0.952		mg/L		95	80 - 120		
1,2-Dichloroethane	<0.020		1.00	0.921		mg/L		92	72 - 128		
1,1-Dichloroethene	<0.020		1.00	0.997		mg/L		100	80 - 120		

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

Lab Sample ID: 680-138279-2 MS
Matrix: Solid
Analysis Batch: 479788

Client Sample ID: Ash-Grumman
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	<0.020		1.00	1.07		mg/L		107	71 - 123
Trichloroethene	<0.020		1.00	1.02		mg/L		102	80 - 120
Vinyl chloride	<0.020		1.00	1.08		mg/L		108	80 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*81*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 122*
1,2-Dichloroethane-d4 (Surr)	*87*		*73 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 680-138279-2 MSD
Matrix: Solid
Analysis Batch: 479788

Client Sample ID: Ash-Grumman
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.020		1.00	0.986		mg/L		99	80 - 120	2	20
2-Butanone (MEK)	<0.20		5.00	4.36		mg/L		87	79 - 125	1	20
Carbon tetrachloride	<0.020		1.00	1.01		mg/L		101	67 - 125	1	20
Chlorobenzene	<0.020		1.00	1.01		mg/L		101	80 - 120	2	20
Chloroform	<0.020		1.00	0.926		mg/L		93	80 - 120	3	20
1,2-Dichloroethane	<0.020		1.00	0.905		mg/L		90	72 - 128	2	50
1,1-Dichloroethene	<0.020		1.00	0.944		mg/L		94	80 - 120	5	20
Tetrachloroethene	<0.020		1.00	1.01		mg/L		101	71 - 123	5	20
Trichloroethene	<0.020		1.00	0.997		mg/L		100	80 - 120	2	20
Vinyl chloride	<0.020		1.00	1.07		mg/L		107	80 - 129	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 122*
1,2-Dichloroethane-d4 (Surr)	*86*		*73 - 131*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 680-479935/20-A
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 479935

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
2,4-Dinitrotoluene	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
Hexachlorobenzene	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
Hexachlorobutadiene	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
Hexachloroethane	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
2-Methylphenol	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
3 & 4 Methylphenol	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
Nitrobenzene	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1

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

Lab Sample ID: MB 680-479935/20-A
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 479935

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:21	1
Pyridine	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:21	1
2,4,5-Trichlorophenol	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1
2,4,6-Trichlorophenol	<0.010		0.010		mg/L		05/15/17 16:52	05/17/17 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*38 - 130*	*05/15/17 16:52*	*05/17/17 16:21*	*1*
2-Fluorophenol (Surr)	*61*		*25 - 130*	*05/15/17 16:52*	*05/17/17 16:21*	*1*
Nitrobenzene-d5 (Surr)	*73*		*39 - 130*	*05/15/17 16:52*	*05/17/17 16:21*	*1*
Phenol-d5 (Surr)	*70*		*25 - 130*	*05/15/17 16:52*	*05/17/17 16:21*	*1*
Terphenyl-d14 (Surr)	*95*		*10 - 143*	*05/15/17 16:52*	*05/17/17 16:21*	*1*
2,4,6-Tribromophenol (Surr)	*99*		*31 - 141*	*05/15/17 16:52*	*05/17/17 16:21*	*1*

Lab Sample ID: LCS 680-479935/21-A
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 479935

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dichlorobenzene			0.100	0.0669		mg/L		67	31 - 130		
2,4-Dinitrotoluene			0.100	0.0903		mg/L		90	52 - 130		
Hexachlorobenzene			0.100	0.0909		mg/L		91	43 - 130		
Hexachlorobutadiene			0.100	0.0732		mg/L		73	27 - 130		
Hexachloroethane			0.100	0.0678		mg/L		68	29 - 130		
2-Methylphenol			0.100	0.0807		mg/L		81	40 - 130		
3 & 4 Methylphenol			0.100	0.0776		mg/L		78	42 - 130		
Nitrobenzene			0.100	0.0796		mg/L		80	43 - 130		
Pentachlorophenol			0.200	0.173		mg/L		86	33 - 130		
Pyridine			0.100	0.0538		mg/L		54	10 - 130		
2,4,5-Trichlorophenol			0.100	0.0928		mg/L		93	48 - 130		
2,4,6-Trichlorophenol			0.100	0.0846		mg/L		85	47 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*73*		*38 - 130*
2-Fluorophenol (Surr)	*62*		*25 - 130*
Nitrobenzene-d5 (Surr)	*75*		*39 - 130*
Phenol-d5 (Surr)	*70*		*25 - 130*
Terphenyl-d14 (Surr)	*95*		*10 - 143*
2,4,6-Tribromophenol (Surr)	*95*		*31 - 141*

Lab Sample ID: LB 680-479476/1-D
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 479935

Analyte	LB Result	LB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
2,4-Dinitrotoluene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
Hexachlorobenzene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
Hexachlorobutadiene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1

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

Lab Sample ID: LB 680-479476/1-D
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 479935

Analyte	LB Result	LB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
2-Methylphenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
3 & 4 Methylphenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
Nitrobenzene	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
Pentachlorophenol	<0.25		0.25		mg/L		05/15/17 16:52	05/17/17 16:44	1
Pyridine	<0.25		0.25		mg/L		05/15/17 16:52	05/17/17 16:44	1
2,4,5-Trichlorophenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1
2,4,6-Trichlorophenol	<0.050		0.050		mg/L		05/15/17 16:52	05/17/17 16:44	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*38 - 130*	*05/15/17 16:52*	*05/17/17 16:44*	*1*
2-Fluorophenol (Surr)	*66*		*25 - 130*	*05/15/17 16:52*	*05/17/17 16:44*	*1*
Nitrobenzene-d5 (Surr)	*80*		*39 - 130*	*05/15/17 16:52*	*05/17/17 16:44*	*1*
Phenol-d5 (Surr)	*68*		*25 - 130*	*05/15/17 16:52*	*05/17/17 16:44*	*1*
Terphenyl-d14 (Surr)	*93*		*10 - 143*	*05/15/17 16:52*	*05/17/17 16:44*	*1*
2,4,6-Tribromophenol (Surr)	*93*		*31 - 141*	*05/15/17 16:52*	*05/17/17 16:44*	*1*

Lab Sample ID: 680-138279-2 MS
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Ash-Grumman
Prep Type: TCLP
Prep Batch: 479935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	<0.049		0.498	0.284		mg/L		57	31 - 130
2,4-Dinitrotoluene	<0.049		0.498	0.354		mg/L		71	52 - 130
Hexachlorobenzene	<0.049		0.498	0.369		mg/L		74	43 - 130
Hexachlorobutadiene	<0.049		0.498	0.314		mg/L		63	27 - 130
Hexachloroethane	<0.049		0.498	0.279		mg/L		56	29 - 130
2-Methylphenol	<0.049		0.498	0.326		mg/L		65	40 - 130
3 & 4 Methylphenol	<0.049		0.498	0.286		mg/L		57	42 - 130
Nitrobenzene	<0.049		0.498	0.346		mg/L		70	43 - 130
Pentachlorophenol	<0.25		0.997	0.660		mg/L		66	33 - 130
Pyridine	<0.25		0.498	<0.25		mg/L		43	10 - 130
2,4,5-Trichlorophenol	<0.049		0.498	0.345		mg/L		69	48 - 130
2,4,6-Trichlorophenol	<0.049		0.498	0.333		mg/L		67	47 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*58*		*38 - 130*
2-Fluorophenol (Surr)	*52*		*25 - 130*
Nitrobenzene-d5 (Surr)	*63*		*39 - 130*
Phenol-d5 (Surr)	*57*		*25 - 130*
Terphenyl-d14 (Surr)	*75*		*10 - 143*
2,4,6-Tribromophenol (Surr)	*77*		*31 - 141*

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

Lab Sample ID: 680-138279-2 MSD
Matrix: Solid
Analysis Batch: 480308

Client Sample ID: Ash-Grumman
Prep Type: TCLP
Prep Batch: 479935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	<0.049		0.498	0.327		mg/L		66	31 - 130	14	50
2,4-Dinitrotoluene	<0.049		0.498	0.477		mg/L		96	52 - 130	30	50
Hexachlorobenzene	<0.049		0.498	0.460		mg/L		92	43 - 130	22	50
Hexachlorobutadiene	<0.049		0.498	0.343		mg/L		69	27 - 130	9	50
Hexachloroethane	<0.049		0.498	0.303		mg/L		61	29 - 130	8	50
2-Methylphenol	<0.049		0.498	0.379		mg/L		76	40 - 130	15	50
3 & 4 Methylphenol	<0.049		0.498	0.369		mg/L		74	42 - 130	25	50
Nitrobenzene	<0.049		0.498	0.401		mg/L		80	43 - 130	15	50
Pentachlorophenol	<0.25		0.997	0.825		mg/L		83	33 - 130	22	50
Pyridine	<0.25		0.498	0.291		mg/L		58	10 - 130	29	50
2,4,5-Trichlorophenol	<0.049		0.498	0.453		mg/L		91	48 - 130	27	50
2,4,6-Trichlorophenol	<0.049		0.498	0.428		mg/L		86	47 - 130	25	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*38 - 130*
2-Fluorophenol (Surr)	*62*		*25 - 130*
Nitrobenzene-d5 (Surr)	*73*		*39 - 130*
Phenol-d5 (Surr)	*68*		*25 - 130*
Terphenyl-d14 (Surr)	*89*		*10 - 143*
2,4,6-Tribromophenol (Surr)	*92*		*31 - 141*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-479683/1-A
Matrix: Solid
Analysis Batch: 479888

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 479683

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.020		0.020		mg/L		05/12/17 12:11	05/12/17 18:59	1
Barium	<0.10		0.10		mg/L		05/12/17 12:11	05/12/17 18:59	1
Cadmium	<0.010		0.010		mg/L		05/12/17 12:11	05/12/17 18:59	1
Chromium	<0.020		0.020		mg/L		05/12/17 12:11	05/12/17 18:59	1
Lead	<0.020		0.020		mg/L		05/12/17 12:11	05/12/17 18:59	1
Selenium	<0.050		0.050		mg/L		05/12/17 12:11	05/12/17 18:59	1
Silver	<0.010		0.010		mg/L		05/12/17 12:11	05/12/17 18:59	1

Lab Sample ID: LCS 680-479683/2-A
Matrix: Solid
Analysis Batch: 479888

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 479683

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			2.00	1.87		mg/L		94	80 - 120		
Barium			2.00	1.86		mg/L		93	80 - 120		
Cadmium			1.00	0.927		mg/L		93	80 - 120		
Chromium			2.00	1.90		mg/L		95	80 - 120		
Lead			10.0	8.95		mg/L		90	80 - 120		
Selenium			2.00	1.71		mg/L		85	80 - 120		
Silver			1.00	0.875		mg/L		88	80 - 120		

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Lab Sample ID: LB 680-479476/1-B
Matrix: Solid
Analysis Batch: 479888

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 479683

Analyte	LB Result	LB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20		0.20		mg/L		05/12/17 12:11	05/12/17 19:08	1
Barium	<1.0		1.0		mg/L		05/12/17 12:11	05/12/17 19:08	1
Cadmium	<0.10		0.10		mg/L		05/12/17 12:11	05/12/17 19:08	1
Chromium	<0.20		0.20		mg/L		05/12/17 12:11	05/12/17 19:08	1
Lead	<0.20		0.20		mg/L		05/12/17 12:11	05/12/17 19:08	1
Selenium	<0.50		0.50		mg/L		05/12/17 12:11	05/12/17 19:08	1
Silver	<0.10		0.10		mg/L		05/12/17 12:11	05/12/17 19:08	1

Lab Sample ID: 680-138279-1 MS
Matrix: Solid
Analysis Batch: 479888

Client Sample ID: Ash-Kraft
Prep Type: TCLP
Prep Batch: 479683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	<0.20		1.60	1.42		mg/L		89	75 - 125		
Barium	<1.0	F1	1.60	2.04	F1	mg/L		127	75 - 125		
Cadmium	<0.10		1.60	1.43		mg/L		89	75 - 125		
Chromium	<0.20		1.60	1.47		mg/L		92	75 - 125		
Lead	<0.20		1.60	1.38		mg/L		86	75 - 125		
Selenium	<0.50		1.60	1.27		mg/L		79	75 - 125		
Silver	<0.10		1.60	1.47		mg/L		92	75 - 125		

Lab Sample ID: 680-138279-1 MSD
Matrix: Solid
Analysis Batch: 479888

Client Sample ID: Ash-Kraft
Prep Type: TCLP
Prep Batch: 479683

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	<0.20		1.60	1.38		mg/L		86	75 - 125	3	20
Barium	<1.0	F1	1.60	1.99		mg/L		124	75 - 125	3	20
Cadmium	<0.10		1.60	1.39		mg/L		87	75 - 125	3	20
Chromium	<0.20		1.60	1.43		mg/L		89	75 - 125	3	20
Lead	<0.20		1.60	1.33		mg/L		83	75 - 125	3	20
Selenium	<0.50		1.60	1.25		mg/L		78	75 - 125	1	20
Silver	<0.10		1.60	1.42		mg/L		89	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-479700/1-A
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 479700

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/12/17 14:02	05/15/17 10:45	1

Lab Sample ID: LCS 680-479700/2-A
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 479700

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.250	0.252		mg/L		101	80 - 120		

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LB 680-479476/1-C
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 479700

Analyte	LB Result	LB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020		mg/L		05/12/17 14:02	05/15/17 11:08	1

Lab Sample ID: 680-138279-1 MS
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Ash-Kraft
Prep Type: TCLP
Prep Batch: 479700

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.020		0.0830	0.0742		mg/L		89	80 - 120		

Lab Sample ID: 680-138279-1 MSD
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Ash-Kraft
Prep Type: TCLP
Prep Batch: 479700

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.020		0.0830	0.0753		mg/L		91	80 - 120	1	20

Method: 1030 - Ignitability, Solids

Lab Sample ID: MB 680-479260/2
Matrix: Solid
Analysis Batch: 479260

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	NB				mm/sec			05/10/17 08:38	1

Method: 9014 - Cyanide, Reactive

Lab Sample ID: MB 400-352497/1-A
Matrix: Solid
Analysis Batch: 352951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 352497

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<0.25		0.25		mg/Kg		05/08/17 14:03	05/09/17 14:45	1

Lab Sample ID: LCS 400-352497/2-A
Matrix: Solid
Analysis Batch: 352951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 352497

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Reactive			1.00	<0.25		mg/Kg		16	0 - 50		

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 400-352498/1-A
Matrix: Solid
Analysis Batch: 352921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 352498

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<150		150		mg/Kg		05/08/17 14:03	05/09/17 12:02	1

Lab Sample ID: LCS 400-352498/2-A
Matrix: Solid
Analysis Batch: 352921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 352498

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide, Reactive			1000	155		mg/Kg		15	0 - 80		

Method: 9045D - pH

Lab Sample ID: LCS 680-479207/1
Matrix: Solid
Analysis Batch: 479207

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.1		S.U.		101	79 - 126		

Lab Sample ID: 680-138279-1 DU
Matrix: Solid
Analysis Batch: 479207

Client Sample ID: Ash-Kraft
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.0	HF		6.1		SU				1	40

GC/MS VOA

Leach Batch: 479494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	1311	
680-138279-2	Ash-Grumman	TCLP	Solid	1311	
LB 680-479494/1-A	Method Blank	TCLP	Solid	1311	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	1311	
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	1311	

Analysis Batch: 479788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	8260B	479494
680-138279-2	Ash-Grumman	TCLP	Solid	8260B	479494
LB 680-479494/1-A	Method Blank	TCLP	Solid	8260B	479494
MB 680-479788/8	Method Blank	Total/NA	Solid	8260B	
LCS 680-479788/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 680-479788/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	8260B	479494
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	8260B	479494

GC/MS Semi VOA

Leach Batch: 479476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	1311	
680-138279-2	Ash-Grumman	TCLP	Solid	1311	
LB 680-479476/1-D	Method Blank	TCLP	Solid	1311	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	1311	
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	1311	

Prep Batch: 479935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	3520C	479476
680-138279-2	Ash-Grumman	TCLP	Solid	3520C	479476
LB 680-479476/1-D	Method Blank	TCLP	Solid	3520C	479476
MB 680-479935/20-A	Method Blank	Total/NA	Solid	3520C	
LCS 680-479935/21-A	Lab Control Sample	Total/NA	Solid	3520C	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	3520C	479476
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	3520C	479476

Analysis Batch: 480308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	8270D	479935
680-138279-2	Ash-Grumman	TCLP	Solid	8270D	479935
LB 680-479476/1-D	Method Blank	TCLP	Solid	8270D	479935
MB 680-479935/20-A	Method Blank	Total/NA	Solid	8270D	479935
LCS 680-479935/21-A	Lab Control Sample	Total/NA	Solid	8270D	479935
680-138279-2 MS	Ash-Grumman	TCLP	Solid	8270D	479935
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	8270D	479935

Metals

Leach Batch: 479476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	1311	
680-138279-2	Ash-Grumman	TCLP	Solid	1311	
LB 680-479476/1-B	Method Blank	TCLP	Solid	1311	
LB 680-479476/1-C	Method Blank	TCLP	Solid	1311	
680-138279-1 MS	Ash-Kraft	TCLP	Solid	1311	
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	1311	

Prep Batch: 479683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	3010A	479476
680-138279-2	Ash-Grumman	TCLP	Solid	3010A	479476
LB 680-479476/1-B	Method Blank	TCLP	Solid	3010A	479476
MB 680-479683/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 680-479683/2-A	Lab Control Sample	Total/NA	Solid	3010A	
680-138279-1 MS	Ash-Kraft	TCLP	Solid	3010A	479476
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	3010A	479476

Prep Batch: 479700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	7470A	479476
680-138279-2	Ash-Grumman	TCLP	Solid	7470A	479476
LB 680-479476/1-C	Method Blank	TCLP	Solid	7470A	479476
MB 680-479700/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 680-479700/2-A	Lab Control Sample	Total/NA	Solid	7470A	
680-138279-1 MS	Ash-Kraft	TCLP	Solid	7470A	479476
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	7470A	479476

Analysis Batch: 479888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	6010C	479683
680-138279-2	Ash-Grumman	TCLP	Solid	6010C	479683
LB 680-479476/1-B	Method Blank	TCLP	Solid	6010C	479683
MB 680-479683/1-A	Method Blank	Total/NA	Solid	6010C	479683
LCS 680-479683/2-A	Lab Control Sample	Total/NA	Solid	6010C	479683
680-138279-1 MS	Ash-Kraft	TCLP	Solid	6010C	479683
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	6010C	479683

Analysis Batch: 479930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	7470A	479700
680-138279-2	Ash-Grumman	TCLP	Solid	7470A	479700
LB 680-479476/1-C	Method Blank	TCLP	Solid	7470A	479700
MB 680-479700/1-A	Method Blank	Total/NA	Solid	7470A	479700
LCS 680-479700/2-A	Lab Control Sample	Total/NA	Solid	7470A	479700
680-138279-1 MS	Ash-Kraft	TCLP	Solid	7470A	479700
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	7470A	479700

General Chemistry

Prep Batch: 352497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	7.3.3	
680-138279-2	Ash-Grumman	Total/NA	Solid	7.3.3	
MB 400-352497/1-A	Method Blank	Total/NA	Solid	7.3.3	
LCS 400-352497/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	

Prep Batch: 352498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	7.3.4	
680-138279-2	Ash-Grumman	Total/NA	Solid	7.3.4	
MB 400-352498/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 400-352498/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	

Analysis Batch: 352921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	9034	352498
680-138279-2	Ash-Grumman	Total/NA	Solid	9034	352498
MB 400-352498/1-A	Method Blank	Total/NA	Solid	9034	352498
LCS 400-352498/2-A	Lab Control Sample	Total/NA	Solid	9034	352498

Analysis Batch: 352951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	9014	352497
680-138279-2	Ash-Grumman	Total/NA	Solid	9014	352497
MB 400-352497/1-A	Method Blank	Total/NA	Solid	9014	352497
LCS 400-352497/2-A	Lab Control Sample	Total/NA	Solid	9014	352497

Analysis Batch: 479207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	9045D	
680-138279-2	Ash-Grumman	Total/NA	Solid	9045D	
LCS 680-479207/1	Lab Control Sample	Total/NA	Solid	9045D	
680-138279-1 DU	Ash-Kraft	Total/NA	Solid	9045D	

Analysis Batch: 479260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	1030	
680-138279-2	Ash-Grumman	Total/NA	Solid	1030	
MB 680-479260/2	Method Blank	Total/NA	Solid	1030	

Geotechnical

Analysis Batch: 116526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	D422	
680-138279-2	Ash-Grumman	Total/NA	Solid	D422	

Lab Chronicle

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Kraft

Lab Sample ID: 680-138279-1

Date Collected: 05/02/17 14:55

Matrix: Solid

Date Received: 05/03/17 08:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			20.06 g	400 mL	479494	05/11/17 15:56	EDE	TAL SAV
TCLP	Analysis	8260B		20	5 mL	5 mL	479788	05/14/17 20:15	CEJ	TAL SAV
	Instrument ID: CMSB									
TCLP	Leach	1311			100.05 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3520C			201.4 mL	1 mL	479935	05/15/17 16:52	CEW	TAL SAV
TCLP	Analysis	8270D		1			480308	05/17/17 19:27	OK	TAL SAV
	Instrument ID: CMSE									
TCLP	Leach	1311			100.05 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3010A			5 mL	50 mL	479683	05/12/17 12:11	AJR	TAL SAV
TCLP	Analysis	6010C		1			479888	05/12/17 19:13	BCB	TAL SAV
	Instrument ID: ICPE									
TCLP	Leach	1311			100.05 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	7470A			0.5 mL	50 mL	479700	05/12/17 14:02	JKL	TAL SAV
TCLP	Analysis	7470A		1			479930	05/15/17 11:18	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	1030		1			479260	05/10/17 08:38	LWB	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Prep	7.3.3			10 g	100 mL	352497	05/08/17 14:03	CLM	TAL PEN
Total/NA	Analysis	9014		1	10 mL	10 mL	352951	05/09/17 14:45	CLM	TAL PEN
	Instrument ID: KONELAB									
Total/NA	Prep	7.3.4			10 g	100 mL	352498	05/08/17 14:03	CLM	TAL PEN
Total/NA	Analysis	9034		1	100 mL	100 mL	352921	05/09/17 12:02	CLM	TAL PEN
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9045D		1	20.12 g	20 mL	479207	05/11/17 15:19	LWB	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	D422		1			116526	05/04/17 18:54	VTP	TAL BUR
	Instrument ID: D422_import									

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			20.05 g	400 mL	479494	05/11/17 15:56	EDE	TAL SAV
TCLP	Analysis	8260B		20	5 mL	5 mL	479788	05/14/17 20:40	CEJ	TAL SAV
	Instrument ID: CMSB									
TCLP	Leach	1311			100.10 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3520C			203.1 mL	1 mL	479935	05/15/17 16:52	CEW	TAL SAV
TCLP	Analysis	8270D		1			480308	05/17/17 19:51	OK	TAL SAV
	Instrument ID: CMSE									
TCLP	Leach	1311			100.10 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3010A			5 mL	50 mL	479683	05/12/17 12:11	AJR	TAL SAV
TCLP	Analysis	6010C		1			479888	05/12/17 19:37	BCB	TAL SAV
	Instrument ID: ICPE									

Lab Chronicle

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.10 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	7470A			0.5 mL	50 mL	479700	05/12/17 14:02	JKL	TAL SAV
TCLP	Analysis	7470A		1			479930	05/15/17 11:28	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	1030		1			479260	05/10/17 08:38	LWB	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Prep	7.3.3			10 g	100 mL	352497	05/08/17 15:20	CLM	TAL PEN
Total/NA	Analysis	9014		1	10 mL	10 mL	352951	05/09/17 14:45	CLM	TAL PEN
	Instrument ID: KONELAB									
Total/NA	Prep	7.3.4			10 g	100 mL	352498	05/08/17 15:20	CLM	TAL PEN
Total/NA	Analysis	9034		1	100 mL	100 mL	352921	05/09/17 12:02	CLM	TAL PEN
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9045D		1	19.70 g	20 mL	479207	05/11/17 15:19	LWB	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	D422		1			116526	05/04/17 18:57	VTP	TAL BUR
	Instrument ID: D422_import									

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Laboratory: TestAmerica Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Georgia	State Program	4	N/A	06-30-17 *

Laboratory: TestAmerica Burlington

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-18
Florida	NELAP	4	E87467	06-30-17 *
L-A-B	DoD ELAP		L2336	02-25-20
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-17
New Hampshire	NELAP	1	2006	12-18-17
New Jersey	NELAP	2	VT972	06-30-17 *
New York	NELAP	2	10391	04-01-18
Pennsylvania	NELAP	3	68-00489	04-30-18
Rhode Island	State Program	1	LAO00298	12-30-17
US Fish & Wildlife	Federal		LE-058448-0	10-31-17
USDA	Federal		P330-11-00093	12-05-19
Vermont	State Program	1	VT-4000	12-31-17
Virginia	NELAP	3	460209	12-14-17

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17

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

Accreditation/Certification Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Laboratory: TestAmerica Pensacola (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17 *
West Virginia DEP	State Program	3	136	06-30-17

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

Method Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
1030	Ignitability, Solids	SW846	TAL SAV
9014	Cyanide, Reactive	SW846	TAL PEN
9034	Sulfide, Reactive	SW846	TAL PEN
9045D	pH	SW846	TAL SAV
D422	Grain Size	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International

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

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Chain of Custody Record

186584

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

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

Client Contact	Project Manager: Sarah Rafalowski	Site Contact:	Date: 5/2/17	COC No:
Company Name: WM-Superior	Tel/Fax: srafalow@wm.com	Lab Contact: Lisa Harvey	Carrier: Client	1 of 1 COCs
Address: 3001 Little Neck Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Savannah, GA 31419	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 770-545-0339	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Ash Analysis	☒ 1 week			
Site: Superior Landfill	☐ 2 days			Job / SDG No.:
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Reactive Cyanide	Reactive Sulfide	Ignitability	Sieve Analysis	Grain Size	Sample Specific Notes:
Ash - Kraft	5/2	2:55p	G	Ash	3			1	1	1	1	*	Need analysis of grain size. This is for WM & NOT GP.
Ash - Grumman	5/2	2:35p	G	Ash	3			1	1	1	1	*	

680-138279 Chain of Custody

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

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

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

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

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

Special Instructions/QC Requirements & Comments:
One week TAT, if possible.

4.0/2.8

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: WM	Date/Time: 5-3/8:54A	Received by: V-Jackson	Company: TA	Date/Time: 5-3-17 854
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/18/2017

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

680-138279 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Kathryn E	COC No: 680-476579.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: kathy.smith@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Georgia	Job #: 680-138279-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 5/9/2017		
City: South Burlington	TAT Requested (days):		
State, Zip: VT, 05403			
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:		
Email:	WO #:		
Project Name: Superior Landfill Waste Char.	Project #: 68018153		
Site:	SSOW#:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)		D422/ (MOD) Sieve Only	D422/ (MOD) MOD Routine list with sieve #140	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Ash-Kraft (680-138279-1)	5/2/17	14:55 Eastern		Solid			X	X	1	
Ash-Grumman (680-138279-2)	5/2/17	14:35 Eastern		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Jessica Edwards	Date/Time: 5/5/17 1621	Company TAS AV	Received by: Michelle Cate	Date/Time: 5/04/17 @ 1030	Company TAS AV
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 836857	Cooler Temperature(s) °C and Other Remarks: 1.3°C

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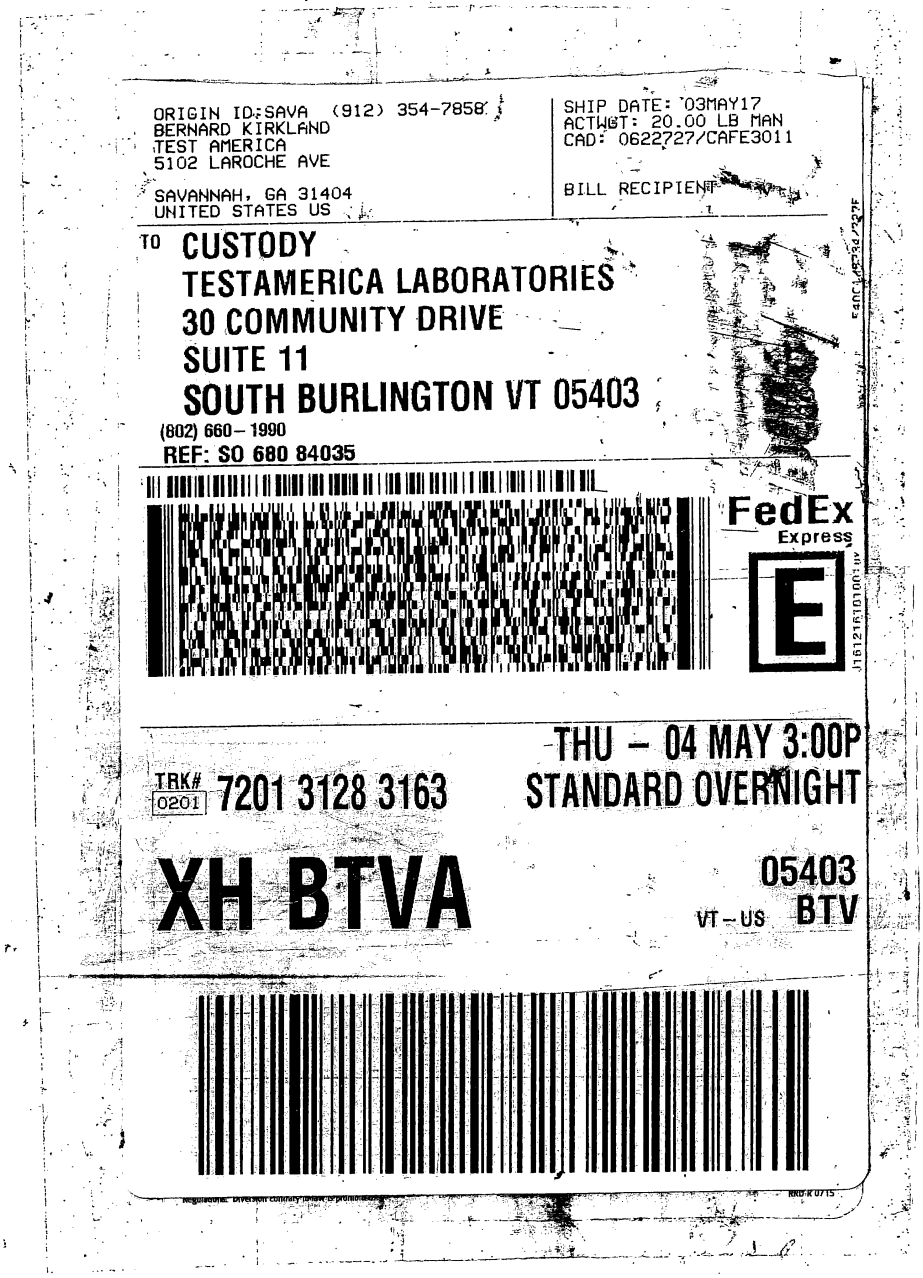
5/18/2017



ORIGIN ID:SAVA (912) 354-7858
BERNARD KIRKLAND
TEST AMERICA
5102 LAROCHE AVE

SAVANNAH, GA 31404
UNITED STATES US

SHIP DATE: 03MAY17
ACTWGT: 20.00 LB MAN
CAD: 0622727/CAFE3011

BILL RECIPIENT

TO CUSTODY
TESTAMERICA LABORATORIES
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
REF: SO 680 84035

FedEx Express

TRK# 0201 7201 3128 3163

THU - 04 MAY 3:00P
STANDARD OVERNIGHT

XH BTVA

05403
VT - US BTV

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Kathryn E	Carrier Tracking No(s):	COC No: 680-476581.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: kathy.smith@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Georgia		Job #: 680-138279-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 5/9/2017			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Superior Landfill Waste Char.	Project #: 68018153			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9014_ReactiveCN/7.3.3 Cyanide, Reactive	9034_Reactive/7.3.4 Sulfide, Reactive	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Ash-Kraft (680-138279-1)	5/2/17	14:55 Eastern		Solid			X	X	1	
Ash-Grumman (680-138279-2)	5/2/17	14:35 Eastern		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Jessica Edwards	5/3/17 1621	TASAV		5/4/17 0851	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.3 IR 2

5/18/2017

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 680-138279-1

Login Number: 138279

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 680-138279-1

Login Number: 138279
List Number: 3
Creator: Cota, Fred P

List Source: TestAmerica Burlington
List Creation: 05/04/17 01:30 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	856857
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 680-138279-1

Login Number: 138279
List Number: 2
Creator: Smith, Demetrius A

List Source: TestAmerica Pensacola
List Creation: 05/04/17 11:51 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Pace Analytical Services, Inc.
5460 Beaumont Center Blvd - Suite 520
Tampa, FL 33634
(813)881-9401

April 14, 2016

Nancy Rose
APEX Companies, LLC
10220 Harney Rd.
Tampa, FL 33592

RE: Project: Harris Marietta X717
Pace Project No.: 35236766

Dear Nancy Rose:
Enclosed are the analytical results for sample(s) received by the laboratory on April 01, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

LA Palmer

Lori Palmer
lori.palmer@pacelabs.com
Project Manager

Enclosures

cc: Apex Lab Distribution list, APEX Companies, LLC

Pace Analytical Services, Inc.
5460 Beaumont Center Blvd - Suite 520
Tampa, FL 33634
(813)881-9401

CERTIFICATIONS

Project: Harris Marietta X717
Pace Project No.: 35236766

Ormond Beach Certification IDs
8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

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SAMPLE SUMMARY

Project: Harris Marietta X717
Pace Project No.: 35236766

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35236766001	**SB-BD DUP-1-2**	Solid	03/30/16 13:35	04/01/16 04:25
35236766002	**SB-A1A-1-2**	Solid	03/30/16 14:35	04/01/16 04:25
35236766003	**SB-A1B-1-2**	Solid	03/30/16 13:00	04/01/16 04:25
35236766004	**SB-14A DUP-1-2**	Solid	03/30/16 15:40	04/01/16 04:25
35236766005	**SB-14B DUP-1-2**	Solid	03/30/16 17:05	04/01/16 04:25
35236766006	**SB-14D DUP-1-2**	Solid	03/30/16 16:30	04/01/16 04:25
35236766007	**SB-A2A-1-1.5**	Solid	03/30/16 17:40	04/01/16 04:25

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
5460 Beaumont Center Blvd - Suite 520
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(813)881-9401

SAMPLE ANALYTE COUNT

Project: Harris Marietta X717
Pace Project No.: 35236766

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35236766001	**SB-BD DUP-1-2**	FL-PRO	JGW	3	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35236766002	**SB-A1A-1-2**	FL-PRO	JGW	3	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35236766003	**SB-A1B-1-2**	FL-PRO	JGW	3	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35236766004	**SB-14A DUP-1-2**	EPA 8260	GPW	8	PASI-O
		EPA 8260 SPLP	SK1	8	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35236766005	**SB-14B DUP-1-2**	EPA 8260	GPW	8	PASI-O
		EPA 8260 SPLP	SK1	8	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35236766006	**SB-14D DUP-1-2**	EPA 8260	GPW	8	PASI-O
		EPA 8260 SPLP	SK1	8	PASI-O
		ASTM D2974-87	MLO	1	PASI-O
35236766007	**SB-A2A-1-1.5**	FL-PRO	JGW	3	PASI-O
		EPA 8260	GPW	8	PASI-O
		ASTM D2974-87	MLO	1	PASI-O

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Tampa, FL 33634
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ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-BD DUP-1-2 **Lab ID: 35236766001** Collected: 03/30/16 13:35 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
FL-PRO Soil Microwave	Analytical Method: FL-PRO Preparation Method: EPA 3546								
Petroleum Range Organics	**2.9 U**	mg/kg	4.5	2.9	1	04/07/16 03:00	04/07/16 13:18		
Surrogates									
o-Terphenyl (S)	108	%	62-109		1	04/07/16 03:00	04/07/16 13:18	84-15-1	
N-Pentatriacontane (S)	106	%	42-159		1	04/07/16 03:00	04/07/16 13:18	630-07-09	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.1**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-A1A-1-2 **Lab ID: 35236766002** Collected: 03/30/16 14:35 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
FL-PRO Soil Microwave	Analytical Method: FL-PRO Preparation Method: EPA 3546								
Petroleum Range Organics	**2.9 U**	mg/kg	4.5	2.9	1	04/07/16 03:00	04/07/16 13:18		
Surrogates									
o-Terphenyl (S)	102	%	62-109		1	04/07/16 03:00	04/07/16 13:18	84-15-1	
N-Pentatriacontane (S)	98	%	42-159		1	04/07/16 03:00	04/07/16 13:18	630-07-09	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.8**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-A1B-1-2 **Lab ID: 35236766003** Collected: 03/30/16 13:00 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
FL-PRO Soil Microwave	Analytical Method: FL-PRO Preparation Method: EPA 3546								
Petroleum Range Organics	**2.9 U**	mg/kg	4.5	2.9	1	04/07/16 03:00	04/07/16 13:44		
Surrogates									
o-Terphenyl (S)	98	%	62-109		1	04/07/16 03:00	04/07/16 13:44	84-15-1	
N-Pentatriacontane (S)	106	%	42-159		1	04/07/16 03:00	04/07/16 13:44	630-07-09	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.1**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-14A DUP-1-2 **Lab ID: 35236766004** Collected: 03/30/16 15:40 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260								
Benzene	**0.013**	mg/kg	0.0059	0.0030	1		04/05/16 16:09	71-43-2	
Ethylbenzene	**0.0047 I**	mg/kg	0.0059	0.0033	1		04/05/16 16:09	100-41-4	
Methyl-tert-butyl ether	**0.0029 U**	mg/kg	0.0059	0.0029	1		04/05/16 16:09	1634-04-4	
Toluene	**0.0034 I**	mg/kg	0.0059	0.0032	1		04/05/16 16:09	108-88-3	
Xylene (Total)	**0.0060 U**	mg/kg	0.018	0.0060	1		04/05/16 16:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	89	%	55-148		1		04/05/16 16:09	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-131		1		04/05/16 16:09	17060-07-0	
Toluene-d8 (S)	98	%	84-117		1		04/05/16 16:09	2037-26-5	
8260 MSV SPLP	Analytical Method: EPA 8260 SPLP Leachate Method/Date: EPA 1312; 04/05/16 00:00								
Benzene	**2.3**	ug/L	1.0	0.10	1		04/12/16 11:12	71-43-2	
Ethylbenzene	**49.2**	ug/L	1.0	0.50	1		04/12/16 11:12	100-41-4	
Methyl-tert-butyl ether	**0.50 U**	ug/L	1.0	0.50	1		04/12/16 11:12	1634-04-4	
Toluene	**29.1**	ug/L	1.0	0.50	1		04/12/16 11:12	108-88-3	
Xylene (Total)	**183**	ug/L	1.0	0.50	1		04/12/16 11:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-114		1		04/12/16 11:12	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	86-125		1		04/12/16 11:12	17060-07-0	
Toluene-d8 (S)	99	%	87-113		1		04/12/16 11:12	2037-26-5	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.6**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-14B DUP-1-2 **Lab ID: 35236766005** Collected: 03/30/16 17:05 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260								
Benzene	**0.074**	mg/kg	0.0059	0.0030	1		04/05/16 16:26	71-43-2	
Ethylbenzene	**0.0097**	mg/kg	0.0059	0.0033	1		04/05/16 16:26	100-41-4	
Methyl-tert-butyl ether	**0.0029 U**	mg/kg	0.0059	0.0029	1		04/05/16 16:26	1634-04-4	
Toluene	**0.0032 I**	mg/kg	0.0059	0.0032	1		04/05/16 16:26	108-88-3	
Xylene (Total)	**0.40**	mg/kg	0.018	0.0060	1		04/05/16 16:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	80	%	55-148		1		04/05/16 16:26	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-131		1		04/05/16 16:26	17060-07-0	
Toluene-d8 (S)	97	%	84-117		1		04/05/16 16:26	2037-26-5	
8260 MSV SPLP	Analytical Method: EPA 8260 SPLP Leachate Method/Date: EPA 1312; 04/05/16 00:00								
Benzene	**3.9**	ug/L	1.0	0.10	1		04/12/16 11:36	71-43-2	
Ethylbenzene	**5.1**	ug/L	1.0	0.50	1		04/12/16 11:36	100-41-4	
Methyl-tert-butyl ether	**0.50 U**	ug/L	1.0	0.50	1		04/12/16 11:36	1634-04-4	
Toluene	**2.9**	ug/L	1.0	0.50	1		04/12/16 11:36	108-88-3	V
Xylene (Total)	**20.9**	ug/L	1.0	0.50	1		04/12/16 11:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-114		1		04/12/16 11:36	460-00-4	
1,2-Dichloroethane-d4 (S)	88	%	86-125		1		04/12/16 11:36	17060-07-0	
Toluene-d8 (S)	97	%	87-113		1		04/12/16 11:36	2037-26-5	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.8**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Tampa, FL 33634
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ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-14D DUP-1-2 **Lab ID: 35236766006** Collected: 03/30/16 16:30 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260								
Benzene	**0.0059**	mg/kg	0.0049	0.0025	1		04/05/16 16:43	71-43-2	
Ethylbenzene	**0.0029 I**	mg/kg	0.0049	0.0028	1		04/05/16 16:43	100-41-4	
Methyl-tert-butyl ether	**0.0025 U**	mg/kg	0.0049	0.0025	1		04/05/16 16:43	1634-04-4	
Toluene	**0.0027 U**	mg/kg	0.0049	0.0027	1		04/05/16 16:43	108-88-3	
Xylene (Total)	**0.0051 U**	mg/kg	0.015	0.0051	1		04/05/16 16:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	80	%	55-148		1		04/05/16 16:43	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-131		1		04/05/16 16:43	17060-07-0	
Toluene-d8 (S)	98	%	84-117		1		04/05/16 16:43	2037-26-5	
8260 MSV SPLP	Analytical Method: EPA 8260 SPLP Leachate Method/Date: EPA 1312; 04/06/16 00:00								
Benzene	**0.10 U**	ug/L	1.0	0.10	1		04/13/16 08:41	71-43-2	
Ethylbenzene	**0.62 I**	ug/L	1.0	0.50	1		04/13/16 08:41	100-41-4	
Methyl-tert-butyl ether	**0.50 U**	ug/L	1.0	0.50	1		04/13/16 08:41	1634-04-4	
Toluene	**0.80 I**	ug/L	1.0	0.50	1		04/13/16 08:41	108-88-3	
Xylene (Total)	**1.2**	ug/L	1.0	0.50	1		04/13/16 08:41	1330-20-7	BS
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-114		1		04/13/16 08:41	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	86-125		1		04/13/16 08:41	17060-07-0	
Toluene-d8 (S)	102	%	87-113		1		04/13/16 08:41	2037-26-5	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**9.7**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
5460 Beaumont Center Blvd - Suite 520
Tampa, FL 33634
(813)881-9401

ANALYTICAL RESULTS

Project: Harris Marietta X717
Pace Project No.: 35236766

Sample: SB-A2A-1-1.5 **Lab ID: 35236766007** Collected: 03/30/16 17:40 Received: 04/01/16 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
FL-PRO Soil Microwave	Analytical Method: FL-PRO Preparation Method: EPA 3546								
Petroleum Range Organics	**1060**	mg/kg	21.2	13.5	1	04/07/16 03:00	04/07/16 13:44		
Surrogates									
o-Terphenyl (S)	105	%	62-109		1	04/07/16 03:00	04/07/16 13:44	84-15-1	
N-Pentatriacontane (S)	89	%	42-159		1	04/07/16 03:00	04/07/16 13:44	630-07-09	
8260 MSV 5035 Low Level	Analytical Method: EPA 8260								
Benzene	**23.3**	mg/kg	1.4	0.71	250		04/05/16 18:41	71-43-2	
Ethylbenzene	**42.8**	mg/kg	1.4	0.79	250		04/05/16 18:41	100-41-4	
Methyl-tert-butyl ether	**0.69 U**	mg/kg	1.4	0.69	250		04/05/16 18:41	1634-04-4	
Toluene	**227**	mg/kg	13.9	7.5	2500		04/06/16 21:04	108-88-3	
Xylene (Total)	**311**	mg/kg	41.7	14.3	2500		04/06/16 21:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	55-148		250		04/05/16 18:41	460-00-4	D4
1,2-Dichloroethane-d4 (S)	101	%	80-131		250		04/05/16 18:41	17060-07-0	
Toluene-d8 (S)	117	%	84-117		250		04/05/16 18:41	2037-26-5	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.0**	%	0.10	0.10	1		04/07/16 13:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

QC Batch: MSV/18118 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low Level
Associated Lab Samples: 35236766004, 35236766005, 35236766006, 35236766007

METHOD BLANK: 1528212 Matrix: Solid
Associated Lab Samples: 35236766004, 35236766005, 35236766006, 35236766007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	mg/kg	0.0027 U	0.0052	0.0027	04/05/16 12:32	
Ethylbenzene	mg/kg	0.0030 U	0.0052	0.0030	04/05/16 12:32	
Methyl-tert-butyl ether	mg/kg	0.0026 U	0.0052	0.0026	04/05/16 12:32	
Toluene	mg/kg	0.0028 U	0.0052	0.0028	04/05/16 12:32	
Xylene (Total)	mg/kg	0.0054 U	0.016	0.0054	04/05/16 12:32	
1,2-Dichloroethane-d4 (S)	%	97	80-131		04/05/16 12:32	
4-Bromofluorobenzene (S)	%	97	55-148		04/05/16 12:32	
Toluene-d8 (S)	%	101	84-117		04/05/16 12:32	

LABORATORY CONTROL SAMPLE: 1528213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	mg/kg	.02	0.020	104	70-130	
Ethylbenzene	mg/kg	.02	0.021	105	70-130	
Methyl-tert-butyl ether	mg/kg	.02	0.021	108	70-130	
Toluene	mg/kg	.02	0.020	103	70-130	
Xylene (Total)	mg/kg	.059	0.064	109	70-130	
1,2-Dichloroethane-d4 (S)	%			102	80-131	
4-Bromofluorobenzene (S)	%			96	55-148	
Toluene-d8 (S)	%			102	84-117	

MATRIX SPIKE SAMPLE: 1528353

Parameter	Units	35236899002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	mg/kg	0.0032 U	.027	0.030	112	24-141	
Ethylbenzene	mg/kg	0.0035 U	.027	0.029	110	30-130	
Methyl-tert-butyl ether	mg/kg	0.0031 U	.027	0.030	110	31-156	
Toluene	mg/kg	0.0033 U	.027	0.031	117	24-137	
Xylene (Total)	mg/kg	0.0063 U	.079	0.090	115	26-130	
1,2-Dichloroethane-d4 (S)	%				101	80-131	
4-Bromofluorobenzene (S)	%				94	55-148	
Toluene-d8 (S)	%				104	84-117	

SAMPLE DUPLICATE: 1528352

Parameter	Units	35236899001 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	mg/kg	0.0032 U	0.0032 U		40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

SAMPLE DUPLICATE: 1528352

Parameter	Units	35236899001 Result	Dup Result	RPD	Max RPD	Qualifiers
Ethylbenzene	mg/kg	0.0035 U	0.0080		40	
Methyl-tert-butyl ether	mg/kg	0.0031 U	0.0031 U		40	
Toluene	mg/kg	0.0034 U	0.0034 U		40	
Xylene (Total)	mg/kg	0.0064 U	0.042		40	
1,2-Dichloroethane-d4 (S)	%	94	89	4	40	
4-Bromofluorobenzene (S)	%	91	91	1	40	
Toluene-d8 (S)	%	102	99	2	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

QC Batch: MSV/18186 Analysis Method: EPA 8260 SPLP
QC Batch Method: EPA 8260 SPLP Analysis Description: 8260 MSV SPLP
Associated Lab Samples: 35236766004, 35236766005

METHOD BLANK: 1536183 Matrix: Water
Associated Lab Samples: 35236766004, 35236766005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	0.10 U	1.0	0.10	04/12/16 10:23	
Ethylbenzene	ug/L	0.94 I	1.0	0.50	04/12/16 10:23	
Methyl-tert-butyl ether	ug/L	0.50 U	1.0	0.50	04/12/16 10:23	
Toluene	ug/L	1.1	1.0	0.50	04/12/16 10:23	
Xylene (Total)	ug/L	4.7	1.0	0.50	04/12/16 10:23	
1,2-Dichloroethane-d4 (S)	%	89	86-125		04/12/16 10:23	
4-Bromofluorobenzene (S)	%	89	70-114		04/12/16 10:23	
Toluene-d8 (S)	%	101	87-113		04/12/16 10:23	

LABORATORY CONTROL SAMPLE & LCSD: 1536184 1539021

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	17.5	17.7	88	89	70-130	1	40	
Ethylbenzene	ug/L	20	22.2	21.2	111	106	70-130	4	40	
Methyl-tert-butyl ether	ug/L	20	18.3	19.0	92	95	70-130	4	40	
Toluene	ug/L	20	20.5	20.6	103	103	70-130	0	40	
Xylene (Total)	ug/L	60	63.7	62.6	106	104	70-130	2	40	
1,2-Dichloroethane-d4 (S)	%				86	89	86-125			
4-Bromofluorobenzene (S)	%				96	96	70-114			
Toluene-d8 (S)	%				99	99	87-113			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

QC Batch: MSV/18195
QC Batch Method: EPA 8260 SPLP
Analysis Method: EPA 8260 SPLP
Analysis Description: 8260 MSV SPLP
Associated Lab Samples: 35236766006

METHOD BLANK: 1537852 Matrix: Water
Associated Lab Samples: 35236766006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	0.16 I	1.0	0.10	04/13/16 07:47	
Ethylbenzene	ug/L	3.7	1.0	0.50	04/13/16 07:47	
Methyl-tert-butyl ether	ug/L	0.95 I	1.0	0.50	04/13/16 07:47	
Toluene	ug/L	4.7	1.0	0.50	04/13/16 07:47	
Xylene (Total)	ug/L	15.6	1.0	0.50	04/13/16 07:47	
1,2-Dichloroethane-d4 (S)	%	98	86-125		04/13/16 07:47	
4-Bromofluorobenzene (S)	%	103	70-114		04/13/16 07:47	
Toluene-d8 (S)	%	101	87-113		04/13/16 07:47	

LABORATORY CONTROL SAMPLE & LCSD: 1537853 1539533

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	24.3	23.3	121	117	70-130	4	40	J(CC)
Ethylbenzene	ug/L	20	21.2	20.3	106	102	70-130	4	40	
Methyl-tert-butyl ether	ug/L	20	17.1	14.3	86	71	70-130	18	40	
Toluene	ug/L	20	22.8	21.8	114	109	70-130	4	40	
Xylene (Total)	ug/L	60	65.3	62.4	109	104	70-130	5	40	
1,2-Dichloroethane-d4 (S)	%				99	103	86-125			
4-Bromofluorobenzene (S)	%				104	103	70-114			
Toluene-d8 (S)	%				99	101	87-113			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

QC Batch: OEXT/27396 Analysis Method: FL-PRO
QC Batch Method: EPA 3546 Analysis Description: FL-PRO Soil
Associated Lab Samples: 35236766001, 35236766002, 35236766003, 35236766007

METHOD BLANK: 1529785 Matrix: Solid
Associated Lab Samples: 35236766001, 35236766002, 35236766003, 35236766007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Petroleum Range Organics	mg/kg	2.5 U	4.0	2.5	04/07/16 08:38	
N-Pentatriacontane (S)	%	79	42-159		04/07/16 08:38	
o-Terphenyl (S)	%	102	62-109		04/07/16 08:38	

LABORATORY CONTROL SAMPLE: 1529786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Petroleum Range Organics	mg/kg	200	170	85	63-153	
N-Pentatriacontane (S)	%			89	42-159	
o-Terphenyl (S)	%			98	62-109	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1531535 1531536

Parameter	Units	35236572003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Petroleum Range Organics	mg/kg	2.7 U	211	211	201	187	95	88	51-215	7	25	
N-Pentatriacontane (S)	%						94	94	42-159			
o-Terphenyl (S)	%						106	99	62-109			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

QC Batch: PMST/4388 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 35236766001, 35236766002, 35236766003, 35236766004, 35236766005, 35236766006, 35236766007

SAMPLE DUPLICATE: 1531758

Parameter	Units	35235098001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.6	25.0	6	10	

SAMPLE DUPLICATE: 1531759

Parameter	Units	35236575002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.4	12.8	4	10	

SAMPLE DUPLICATE: 1531760

Parameter	Units	35236766006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.7	9.8	1	10	

SAMPLE DUPLICATE: 1531761

Parameter	Units	35236924003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.4	17.3	0	10	

SAMPLE DUPLICATE: 1531762

Parameter	Units	35236924012 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.6	9.1	6	10	

SAMPLE DUPLICATE: 1531763

Parameter	Units	35237656002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	1.4	1.8	22	10	J(D6)

SAMPLE DUPLICATE: 1531764

Parameter	Units	35237656011 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.4	14.3	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Harris Marietta X717
Pace Project No.: 35236766

SAMPLE DUPLICATE: 1531765

Parameter	Units	40130020005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.9	7.8	25	10	J(D6)

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Harris Marietta X717
Pace Project No.: 35236766

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-O	Pace Analytical Services - Ormond Beach

BATCH QUALIFIERS

Batch: MSV/18186

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/18195

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Compound was analyzed for but not detected.
BS	Analyte was detected in the associated method blank for one or more of the constituent analytes used in the calculated result.
D4	Sample was diluted due to the presence of high levels of target analytes.
J(CC)	Estimated Value. The continuing calibration for this compound is outside of method control limits. The result is estimated.
J(D6)	Estimated Value. The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
V	Indicates that the analyte was detected in both the sample and the associated method blank.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Harris Marietta X717
Pace Project No.: 35236766

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35236766001	**SB-BD DUP-1-2**	EPA 3546	OEXT/27396	FL-PRO	GCSV/17833
35236766002	**SB-A1A-1-2**	EPA 3546	OEXT/27396	FL-PRO	GCSV/17833
35236766003	**SB-A1B-1-2**	EPA 3546	OEXT/27396	FL-PRO	GCSV/17833
35236766007	**SB-A2A-1-1.5**	EPA 3546	OEXT/27396	FL-PRO	GCSV/17833
35236766004	**SB-14A DUP-1-2**	EPA 8260	MSV/18118		
35236766005	**SB-14B DUP-1-2**	EPA 8260	MSV/18118		
35236766006	**SB-14D DUP-1-2**	EPA 8260	MSV/18118		
35236766007	**SB-A2A-1-1.5**	EPA 8260	MSV/18118		
35236766004	**SB-14A DUP-1-2**	EPA 8260 SPLP	MSV/18186		
35236766005	**SB-14B DUP-1-2**	EPA 8260 SPLP	MSV/18186		
35236766006	**SB-14D DUP-1-2**	EPA 8260 SPLP	MSV/18195		
35236766001	**SB-BD DUP-1-2**	ASTM D2974-87	PMST/4388		
35236766002	**SB-A1A-1-2**	ASTM D2974-87	PMST/4388		
35236766003	**SB-A1B-1-2**	ASTM D2974-87	PMST/4388		
35236766004	**SB-14A DUP-1-2**	ASTM D2974-87	PMST/4388		
35236766005	**SB-14B DUP-1-2**	ASTM D2974-87	PMST/4388		
35236766006	**SB-14D DUP-1-2**	ASTM D2974-87	PMST/4388		
35236766007	**SB-A2A-1-1.5**	ASTM D2974-87	PMST/4388		

WO# : 35236766

35236766

Chain of Custod

APEX

Page 1 of 1

m #: 62-780.900(2)
Form Title: Chain of Custody Record
Effective Date: 06/12/13
Incorporated in rule: 62-780.300

Company: Apex Companies, LLC
Address: 10220 Harney Road, Thonotosassa, Florida
Apex Project #: DEP15146
Contact Person: Nancy Rose
Phone: 904-900-1779 X 4707 Email: nose@apexcos.com

FDEP Facility No.: 168521733
Project Name and Address:
Harris Marietta X717
8719 W. Beaver Street
Jacksonville, Duval County, Florida

Sampled by [Print Name(s)] / Affiliation
Matt Raybould/Apex Companies, LLC

Sampler(s) Signature(s)
MR Byld

REQUESTED DUE DATE
/ /

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	Preservatives (see codes)								Analyses Requested								Remarks	Lab. No.
							I/O	I	I				I	I	BTEX/MTBE (8260)	TRPH (FL PRO)	SPLP BTEX				SPLP BTEX (HOLD)	FRACTIONATION (HOLD)		
1	SB-BD DUP-1-2'	3/30/16	1335	G	SO	1										X					X			
2	SB-A1A-1-2'	3/30/16	1435	G	SO	1										X					X			
3	SB-A1B-1-2'	3/30/16	1300	G	SO	1										X					X			
4	SB-14A DUP-1-2'	3/30/16	1540	G	SO	7									X		X						Include MS/MSD For BTEX/MTBE	
5	SB-14B DUP-1-2'	3/30/16	1705	G	SO	5									X		X						O = DI H_2O or Methanol	
6	SB-14D DUP-1-2'	3/30/16	1636	G	SO	5									X		X							
7	SB-A2A-1-1.5'	3/30/16	1740	G	SO	6									X	X					X	X		

26 ← Total Number of Containers

Shipment Method

Out: / / Via:

Returned: / / Via:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	MR Byld/Apex Cos.	3/31/16		AJ Pace	4/01/16	04:25
					1-7	T-20

Additional Comments:

ADaPT EDD LAB AND FIELD DATA REQUIRED

Send all reports to Apex-FL-Lab@apexcos.com

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

Pace Analytical Florida Laboratory	Document Name: Sample Condition Upon Receipt Form	Document Revised: December 28, 2015
	Document No.: F-FL-C-007 rev. 07	Issuing Authority: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # WQ#: 35236766
Project Manager: PM: LAP Due Date: 04/08/16
Client: CLIENT: 37-APECOM

Date and Initials of person examining contents: 4/01/16 AS
Label:
Deliver:
pH:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other ☐

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Unkown **Cooler Size if Applicable:**

Tracking #

Custody Seal on Cooler/Box Present: ☐ yes ☑ no **Seals intact:** ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other **Biological Tissue is Frozen:** Yes No N/A

Thermometer Used T-221 **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler #1 Temperature°C 1.7 **(Visual)** 0 **(Correction Factor)** 1.7 **(Actual)**
Cooler #2 Temperature°C _____ **(Visual)** _____ **(Correction Factor)** _____ **(Actual)**
Cooler #3 Temperature°C _____ **(Visual)** _____ **(Correction Factor)** _____ **(Actual)**
Cooler #4 Temperature°C _____ **(Visual)** _____ **(Correction Factor)** _____ **(Actual)**
Cooler #5 Temperature°C _____ **(Visual)** _____ **(Correction Factor)** _____ **(Actual)**
Cooler #6 Temperature°C _____ **(Visual)** _____ **(Correction Factor)** _____ **(Actual)**

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present	☑Yes ☐ No ☐N/A	
Chain of Custody Filled Out	☑Yes ☐ No ☐N/A	
Relinquished Signature & Sampler Name COC	☑Yes ☐ No ☐N/A	
Samples Arrived within Hold Time	☑Yes ☐ No ☐N/A	
Rush TAT requested on COC	☐Yes ☐ No ☑N/A	
Sufficient Volume	☑Yes ☐ No ☐N/A	
Correct Containers Used	☑Yes ☐ No ☐N/A	
Pace Containers Used	☑Yes ☐ No ☐N/A	
Containers Intact	☑Yes ☐ No ☐N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☑Yes ☐ No ☐N/A	
All containers needing acid/base preservation have been checked.	☐Yes ☐ No ☑N/A	HNO3 pH<2 HCl pH<2
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G	☐Yes ☐ No ☑N/A	H2SO4 pH<2 NaOH pH>12 NaOH/ZnOAc pH>9
No Headspace in VOA Vials (>6mm):	☐Yes ☐ No ☑N/A	
Trip Blank Present:	☐Yes ☐ No ☑N/A	

Client Notification/ Resolution:

Person Contacted: Date/Time:

Comments/ Resolution (use back for additional comments):

Project Manager Review: **Date:**

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

June 13, 2019

Jennifer McWhorter
WES Environmental
P.O. Box 70057
Albany, GA 31708

RE: Workorder: J1907417 Harris Marietta

Dear Jennifer McWhorter:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, June 11, 2019. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Allen

Enclosures

CERTIFICATE OF ANALYSIS

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SAMPLE SUMMARY

Workorder: J1907417 Harris Marietta

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1907417001	SBA2AR	Soil	6/11/2019 14:22	6/11/2019 16:30

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ANALYTICAL RESULTS

Workorder: J1907417 Harris Marietta

Lab ID: **J1907417001** Date Received: 06/11/19 16:30 Matrix: Soil

Sample ID: **SBA2AR** Date Collected: 06/11/19 14:22

Results for sample J1907417001 are reported on a dry weight basis.

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Soils	Preparation Method: SW-846 3050B Analytical Method: SW-846 6010							
Arsenic	**0.56**	**U**	**mg/Kg**	**1**	2.2	0.56	6/12/2019 15:42	J
Cadmium	**0.056**	**U**	**mg/Kg**	**1**	0.22	0.056	6/12/2019 15:42	J
Chromium	**0.27**	**I**	**mg/Kg**	**1**	0.45	0.11	6/12/2019 15:42	J
Lead	**0.59**	**I**	**mg/Kg**	**1**	0.89	0.22	6/12/2019 15:42	J
VOLATILES, TCLP								
Analysis Desc: 1311/8260B Analysis, TCLP	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	**0.0016**	**U**	**mg/L**	**10**	0.010	0.0016	6/13/2019 12:57	J
1,2-Dichloroethane-d4 (S)	**105**		**%**	**10**	69-134		6/13/2019 12:57	
Toluene-d8 (S)	**93**		**%**	**10**	72-122		6/13/2019 12:57	
Bromofluorobenzene (S)	**119**		**%**	**10**	79-126		6/13/2019 12:57	
VOLATILES, TCLP								
Analysis Desc: Percent Solids,SM2540G,Soil	Analytical Method: SM 2540G							
Percent Moisture	**11**		**%**	**1**	0.0010	0.0010	6/12/2019 11:00	J

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1907417 Harris Marietta

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

J	DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder: J1907417 Harris Marietta

QC Batch: DGMj/3529 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3050B Prepared: 06/12/2019 09:05
Associated Lab Samples: J1907417001

METHOD BLANK: 3123228

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Arsenic	mg/Kg	0.50	0.50	U
Cadmium	mg/Kg	0.050	0.050	U
Chromium	mg/Kg	0.10	0.10	U
Lead	mg/Kg	0.20	0.20	U

QC Batch: MSVj/3728 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 06/13/2019 07:00
Associated Lab Samples: J1907417001

METHOD BLANK: 3125579

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	mg/L	0.00016	0.00016	U
1,2-Dichloroethane-d4 (S)	%	100	70-128	
Toluene-d8 (S)	%	96	77-119	
Bromofluorobenzene (S)	%	116	86-123	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1907417 Harris Marietta

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1907417001	SBA2AR	SW-846 3050B	DGMj/3529	SW-846 6010	ICPj/2011
J1907417001	SBA2AR			SM 2540G	WCAj/5216
J1907417001	SBA2AR	SW-846 5030B	MSVj/3728	SW-846 8260B	MSVj/3729

Advanced Environmental Laboratories, Inc.
Florida's Largest Laboratory Network

☐ Altamonte Springs: 380 Northlake Blvd., Ste. 1048 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
☐ Fort Myers: 13100 Westlinks Terrace, Ste. 10 • Fort Myers, FL 33913 • 239.674.8130 • Fax 239.674.8128
☒ Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
☐ Tallahassee: 2639 North Monroe St., Suite D, Tallahassee, FL 32303 • 850.219.6274 • Fax 850.219.6275
☐ Gainesville
☐ Miramar:
☐ Tampa:

* J 1907417 *

Client Name: WES Environmental
Address: 6 Box 55857
Phone: 229 869-7396
FAX:
Contact: Jennifer McWhorter
Sampled By: Kevin McWhorter
Turn Around Time: ☐ STANDARD ☒ RUSH
AEL Profile #:

Project Name: Hess Florida
Project Number: 67437
PO Number: B3B504-SR
FDEP Facility No: 16/8521733
FDEP Facility Address: 819 W. Beaver St. Jax
Special Instructions: RUSH
☐ ADaPT ☐ EQuIS ☐ Other

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: Benzene TCLP Extraction only	4 RCRA								LABORATORY I.D. NUMBER
							Preservation										
							Field-Filtered?										
~~SB A1A R~~								~~X~~									
SB A2A R			6/11	1422	SO	2		X	X								

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked
Temp. when received (observed) 4 °C Temp. when received (corrected) 5 °C

DCN: AD-051 Form last revised 06/19/2017
Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

	Relinquished by:	Date	Time	Received by:	Date	Time
1	JEFF Hauser	06/11/19	16:30	Kelsey Dan	6/11	16:30
2						
3						
4						

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID:
Contact Person: Phone :
Supplier of Water:
Site-Address:

Advanced Environmental Labs Inc

Client: WES Env. Project name: Harris Marietta

Date/Time Rcvd: 6-11-19 16:30 Log-In request number: J1907417

Received by: KO Completed by: BA

Cooler/Shipping Information:

Courier: ☐ AEL ☒ Client ☐ UPS ☐ Blue Streak ☐ FedEx ☐ AES ☐ ASAP ☐ Other (describe):

Type: ☒ Cooler ☐ Box ☐ Other (describe)

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	6-11-19 BA 4.6 5°C				
Temp taken from	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler
Temp measured with	☑ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):

Other Information:

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?			✓
2. Were custody papers properly included with samples?	✓		
3. Were custody papers properly filled out (ink, signed, match labels)?	✓		
4. Did all bottles arrive in good condition (unbroken)?	✓		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓		
6. Did the sample labels agree with the chain of custody?	✓		
7. Were correct bottles used for the tests indicated?	✓		
8. Were proper sample preservation techniques indicated on the label?	✓		
9. Were samples received within holding times?	✓		
10. Were all VOA vials free of the presence of air bubbles?			✓
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			✓
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓		
13. Was the cooler temperature less than 6°C?	✓		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.			✓
15. Was sufficient sample volume provided to perform all tests?	✓		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			✓
17. Were all sample containers provided by AEL? (Other than Bacteriological)	✓		
18. Were samples accepted into the laboratory?	✓		
19. When necessary to split samples into other bottles, is it noted in the comments?	✓		

Comments: (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)

DCN: AD-D048
Eff date 2/3/10, Last rev 9/6/16

A-Sh.

MOISTURE DENSITY TEST SHEET
NUCLEAR DENSITY GAUGE METHOD
ASTM D 3017 / 2922

PROJECT NUMBER: I014.122 DATE OF TEST: 10-1-16

PROJECT TITLE: Phase 4, Stage 7A TESTED BY: DD

PROJECT LOCATION: Folkston, Georgia

TEST NUMBER		A-35	A-36	A-37				
TEST LOCATION	NORTH	See	~	~				
	EAST	Map	~	~				
TEST ELEVATION OR LIFT		~	~	~				
TEST DEPTH		12"	12"	12"				
WET DENSITY (pcf)		101.5	95.9	88.6				
MOISTURE (%)		24.0	24.4	13.1				
DRY DENSITY (pcf)		81.9	77.1	78.4				
LABORATORY PROCTOR CURVE NUMBER		Ash-3	Ash-3	Ash-3				
MAXIMUM DRY DENSITY (pcf)		84.5	84.5	84.5				
OPTIMUM MOISTURE (%)		14.6	14.6	14.6				
PERCENT COMPACTION (%)		96.4	91.2	92.7				
DIFFERENCE FROM OPTIMUM MOISTURE		+9.4	+9.8	-1.5				
DENSITY RESULT PASS/FAIL (P/F)		~	~	~	~	~		
MOISTURE RESULT PASS/FAIL (P/F)		~	~	~	~	~		

SPECIFICATIONS: DAILY STANDARD COUNT:

% STANDARD / MODIFIED PROCTOR: 90% DENSITYCOUNT: _____

% OF OPTIMUM MOISTURE CONTENT: NA MOISTURE COUNT: _____

CHECKED BY: _____ DATE: _____

ATLANTIC COAST CONSULTING, INC

Adm. 10-1-16


WETLAND BUFFER
(SEE FACILITY OPERATING RECORD AND
DESIGN AND OPERATIONAL PLAN FOR
WETLANDS ON THE PROPERTY)
EX. LEACHATE STORAGE TANKS
EXISTING PHASE 3 SEDIMENT POND
CONTRACTOR
MATERIALS
STORAGE/STOCKPILE
AREA
EXISTING,
ACTIVE PHASE 3
LANDFILL
STAGE 7A
(15.3 AC)
PROPOSED PHASE 4, STAGE 7A AREA
STAGE 6A
(16.1 AC)
PHASE 3
STAGE 3C
CONTRACTOR OFFICE
TRAILER/EMPLOYEE
PARKING
PHASE 3
STAGE 3D