



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



March 2024

Annual CCR Management Plan and Dust Control Report

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Annual CCR Management Plan and Dust Control Report

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 into 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, 2023 and December 31, 2023 had a total recorded weight of 299,741 tons. During this same period, the facility received 721,907 tons of non-CCR waste. The CCR and Non-CCR tonnages received in each stage

Annual CCR Management Plan and Dust Control Report

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, 2023 and December 31, 2023 was 3,001 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 2023 calendar year, CCR waste received at the facility was placed in individual CCR only lifts or 'block filled' in Stages 6A, 6B, and 7B. 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

Annual CCR Management Plan and Dust Control Report

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, 2023 and December 31, 2023 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

Annual CCR Management Plan and Dust Control Report



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.

Annual CCR Management Plan and Dust Control Report

Appendix A



CCR Tonnage Data

IN THIS APPENDIX:

- Table 1 - 2023 CCR and Non-CCR Tonnage Summary
- Figure 1 – 2023 Isopach and Remaining Tonnages

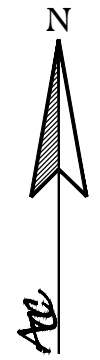
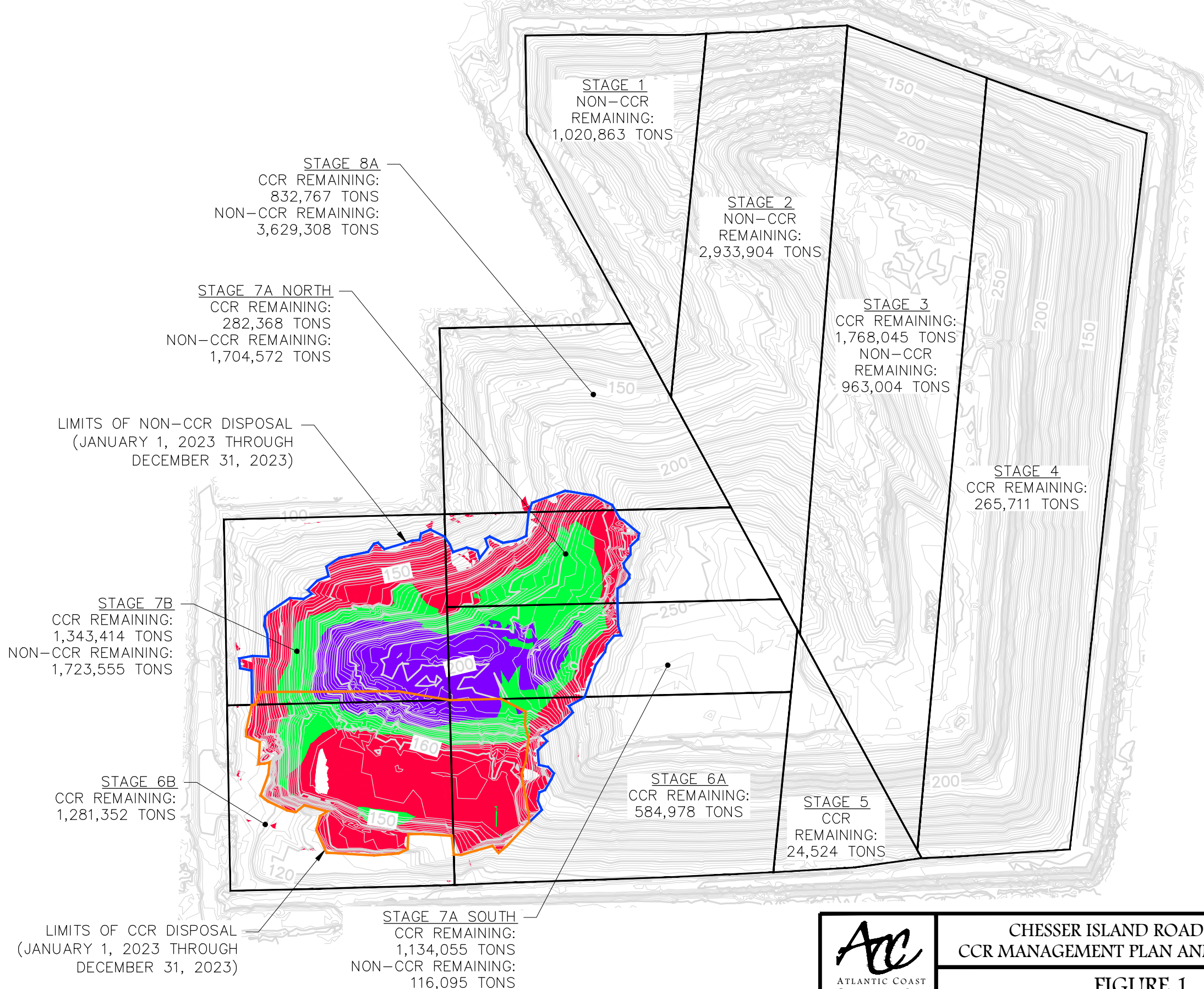
Table 1 - 2023 CCR and Non-CCR Tonnage Summary

Stage #	Max Allowable CCR Weight (tons)	Corresponding Non-CCR Weight (tons)	2023				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)
			CCR Weight (tons)	Non-CCR Weight (tons)	Estimated Daily and Intermediate Cover ¹ (tons)	CCR to Non-CCR Ratio ²						
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	0	0	-	887,668	1,226,710	567,374	1:1.38	0	2,933,904
Stage 3	3,687,680	3,053,277	0	0	0	-	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	0	0	0	-	1,544,272	1,731,022	933,351	1:1.12	265,711	0
Stage 5	297,746	266,464	0	0	0	-	273,222	268,566	143,898	1:0.98	24,524	0
Stage 6A	1,541,723	726,643	59,182	55,078	3,549	1:0.93	956,745	798,147	397,113	1:0.83	584,978	0
Stage 6B	1,712,694	94,452	214,730	27,687	1,784	1:0.13	431,342	272,265	28,060	1:0.63	1,281,352	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	0	100,198	6,456	0:1	35,701	853,268	180,147	1:23.90	282,368	1,704,572
Stage 7A S	1,872,462	1,008,919	0	209,527	13,499	0:1	738,407	892,823	278,365	1:1.21	1,134,055	116,095
Stage 7B	1,369,244	2,433,240	25,830	324,496	20,906	1:12.56	25,830	709,685	62,288	1:27.48	1,343,414	1,723,555
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	4,920	317	0:1	0	545,859	164,045	0:1	832,767	3,629,308
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	299,741	721,907	46,510		7,088,956	9,702,625	3,982,585		18,968,994	20,179,028
Total (CY)	20,008,363	35,877,064	217,223	689,044	28,710		5,341,189	11,256,813	2,458,386			

Notes:

1. The daily and intermediate cover tonnage estimated for this reporting period is based on the assumption that approximately 4% 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.

P: \Industrial\1002-WM Atlanta\426-CCR Update\2024\WM North FL\3-Design Data\2-DWG\2023 Tonnage Figure.dwg 3/25/24 JOSH YOUNG



ELEVATIONS TABLE			
	MIN ELEV	MAX ELEV	Color
1	2.00	20.00	
2	20.00	40.00	
3	40.00	71.40	

 ATLANTIC COAST CONSULTING, INC. 770-594-5998 www.atcc.net Roswell, GA Savannah, GA Knoxville, TN	CHESSEY ISLAND ROAD MSWLF CCR MANAGEMENT PLAN ANNUAL UPDATE	PROJECT : 1002-426 SCALE: 1"=350' DATE: 03/25/24 BY: JLY
	FIGURE 1 2023 ISOPACH AND REMAINING TONNAGES	

CCR Compatibility and Characterization

IN THIS APPENDIX:

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

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

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

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

TestAmerica Job ID: 680-138279-1

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.
α	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

Case Narrative

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

TestAmerica Job ID: 680-138279-1

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

Case Narrative

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

TestAmerica Job ID: 680-138279-1

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 Results

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: 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

TestAmerica Savannah

Client Sample Results

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

TestAmerica Savannah

Client Sample Results

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

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

TestAmerica Savannah

Client Sample Results

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

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

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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	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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Savannah

QC Sample Results

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Sample Results

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

QC Association Summary

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Association Summary

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

TestAmerica Job ID: 680-138279-1

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

TestAmerica Savannah

QC Association Summary

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

TestAmerica Job ID: 680-138279-1

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	

TestAmerica Savannah

Lab Chronicle

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

TestAmerica Job ID: 680-138279-1

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

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

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 08:54

Lab Sample ID: 680-138279-2

Matrix: Solid

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								

TestAmerica Savannah

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.

TestAmerica Savannah

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.

TestAmerica Savannah

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

Savannah, GA 31404
Phone: 912.354.7858 Fax:

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

Client Contact Company Name: WM-Superior Address: 3001 Little Neck Rd. City/State/Zip: Savannah, GA 31419 Phone: 770-545-0339 Fax: Project Name: Ash Analysis Site: Superior Landfill PO #		Project Manager: Sarah Rafalowski Tel/Fax: 814.266.0000 Analysis Turnaround Time ☒ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below ☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day		Site Contact: Lisa Haney Lab Contact: Lisa Haney Date: 5/2/17 Carrier: Client		COC No: 1 of 1 COCs Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Sample Identification Ash - Kraft Ash - Grumman		Sample Type (C=Comp, G=Grab) Sample Date: 5/2/17 Sample Time: 2:55p Matrix: Ash # of Cont.: 3		Filtered Sample (Y/N) Perform MS / MSD (Y/N) Reactive Cyanide Reactive Cyanide Ignitability Ignitability Grain Size Grain Size		Sample Specific Notes: Need analysis of grain size. This is for WM + NOT GP.	
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.							
Special Instructions/OC Requirements & Comments: One week TAT, if possible.							
Relinquished by: Relinquished by:		Relinquished by: Relinquished by:		Relinquished by: Relinquished by:		Relinquished by: Relinquished by:	
Relinquished by: Relinquished by:		Relinquished by: Relinquished by:		Relinquished by: Relinquished by:		Relinquished by: Relinquished by:	
Relinquished by: Relinquished by:		Relinquished by: Relinquished by:		Relinquished by: Relinquished by:		Relinquished by: Relinquished by:	

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

Client Information (Sub Contract Lab)

Client Contact:

Shipping/Receiving

Company:

TestAmerica Laboratories, Inc.

Address:

30 Community Drive, Suite 11,

City:

South Burlington

State, Zip:

VT, 05403

Phone:

802-660-1990(Tel) 802-660-1919(Fax)

Email:

Project Name:

Superior Landfill Waste Char.

Site:

Project #: 68018153

SSOW#: 68018153

Sampler:

Lab PVI:

Smith, Kathryn E

E-Mail:

kathryn.smith@testamericainc.com

Accreditations Required (See note):

State Program - Georgia

State of Origin:

Georgia

Page:

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

680-138279 Chain of Custody

Lab PVI:

Smith, Kathryn E

E-Mail:

kathryn.smith@testamericainc.com

Accreditations Required (See note):

State Program - Georgia

State of Origin:

Georgia

Page:

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

Page:

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

Page:

Page 1 of 1

Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

Page:

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Job #:

680-138279-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

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)

COC No:

680-476579.1

Page:

Page 1

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

SAVANNAH, GA 31404
UNITED STATES US

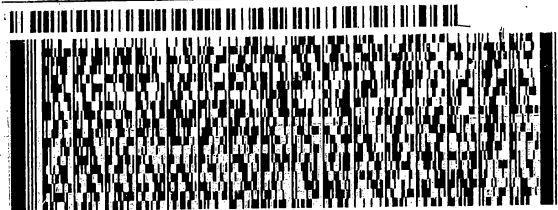
SHIP DATE: 03MAY17
ACTWGT: 20.00 LB MAN
CAD: 0622727/CAFE3011

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# 7201 3128 3163
0201

THU - 04 MAY 3:00P
STANDARD OVERNIGHT

XH BTVA

05403
VT-US BTV



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 $\leq$ 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 $<6\text{mm}$ (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 Source: TestAmerica Burlington

List Number: 3

List Creation: 05/04/17 01:30 PM

Creator: Cota, Fred P

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	1.3°C
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 $<6\text{mm}$ (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 Source: TestAmerica Pensacola

List Number: 2

List Creation: 05/04/17 11:51 AM

Creator: Smith, Demetrius A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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,



Lori Palmer
lori.palmer@pacelabs.com
Project Manager

Enclosures

cc: Apex Lab Distribution list, APEX Companies, LLC



REPORT OF LABORATORY ANALYSIS

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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

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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

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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		

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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		

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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		

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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		

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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		

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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

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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	Analysis Method:	EPA 8260 SPLP
QC Batch 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

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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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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W0#: 35236766



Chain of Custody

Company: Apex Companies, LLC		Page 1 of 1		
Address: 10220 Harney Road, Thonotosassa, Florida		Form #: 62-780.900(2)		
Apex Project #: DEP15146		Form Title: Chain of Custody Record		
Contact Person: Nancy Rose		Effective Date: 06/12/13		
Phone: 904-900-1779 X 4707 Email: nose@apexcos.com		Incorporated in rule: 62-780.300		
Sampled by [Print Name(s)] / Affiliation <i>Math Raybould/Apex Companies, LLC</i>		FDEP Facility No.: 168521733		
Sampler(s) Signature(s) <i>Math Raybould</i>		Project Name and Address: Harris Marietta X717 8719 W. Beaver Street Jacksonville, Duval County, Florida		
Item No.	Field ID No.	Sampled		Requested DUE DATE
		Date	Time	
1	SB-BD DUP-1-2'	3/30/16	1335	/ /
2	SB-A1A-1-2'	3/30/16	1435	
3	SB-A1B-1-2'	3/30/16	1300	
4	SB-14A DUP-1-2'	3/30/16	1540	
5	SB-14B DUP-1-2'	3/30/16	1705	
6	SB-14D DUP-1-2'	3/30/16	1636	
7	SB-A2A-1-1.5'	3/30/16	1740	
Shipment Method		Total Number of Containers		
Out: / /	Via:	Item No.	Relinquished by / Affiliation	Date
Returned: / /	Via:		<i>Math Raybould/Apex Cos.</i>	3/31/16
Additional Comments: ADAPT EDD LAB AND FIELD DATA REQUIRED				
Send all reports to Apex-FL-Lab@apexcos.com				
Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)		Equipment ID No.		
PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)				

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

Sample Condition Upon Receipt Form (SCUR)

Project #
Project Manager:
Client:

WQ# : 35236766

PM: LAP Due Date: 04/08/16
CLIENT: 37-APECOM

Date and Initials of person examining contents: 4/10/16 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 ☐ Unknown 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:	☐ Yes ☐ No ☒ N/A	H2SO4 pH<2 NaOH pH>12
Exceptions: VOA, Coliform, TOC, O&G		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
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

Report ID: 883543 - 875748

Page 1 of 8

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

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☐ Gainesville
☐ Miramar
☐ Tampa: 955

* J 1907417 *

Client: WES Env.Date/Time Rcvd: 6-11-19 16:30Received by: KOProject name: Harris MariettaLog-In request number: JI907417Completed 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)	<u>6-11-19 DE 406 5°C</u>				
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)

↓

Ash

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

PROJECT NUMBER: 1014.122DATE OF TEST: 10-1-16PROJECT TITLE: Phase 4, Stage 7ATESTED BY: DDPROJECT 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		A24-3	A24-3	A24-3				
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%

DENSITY COUNT: _____

% OF OPTIMUM MOISTURE CONTENT: NA

MOISTURE COUNT: _____

CHECKED BY: _____

DATE: _____

ATLANTIC COAST CONSULTING, INC

Asm 10-1-16

