

WASTE MANAGEMENT OF GEORGIA, INC. 3001 LITTLE NECK ROAD | SAVANNAH, GEORGIA 31419



ANNUAL CCR MANAGEMENT PLAN AND DUST CONTROL REPORT

ANTIC COAST Consulting, Inc.





Annual CCR Management Plan and Dust Control Report Table of Contents



CCR Management Annual Report Page CCR MANAGEMENT ACTIVITIES......2 CCR and Non-CCR Waste Volumes2 Record Keeping4 Fugitive Dust Control4 Leachate Collection and Removal System4 Stormwater Management System......4 Environmental Monitoring......4 Emergencies5

Appendix A

CCR Compatibility and Characterization Data



This annual CCR management and dust control 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 Superior Landfill and Recycling Center is comprised of an active Municipal Solid Waste (MSW) Landfill (LF) unit designated Site No. 2 and a closed Municipal Solid Waste Landfill unit designated Site No. 1. The facility's current CCR Management Plan was established through a Design & Operation (D&O) Plan Update approved by Georgia's Environmental Protection Division (EPD) on August 12, 2022.

FACILITY LOCATION AND DESCRIPTION:

The existing landfill is located west of the intersection of Interstate 95 and Little Neck Road in Chatham County, Georgia. It is comprised of an active Municipal Solid Waste Landfill unit designated Site No. 2, Phase 1 (89 acres) and a closed Municipal Solid Waste Landfill unit designated Site No. 1 (26 acres). Site No. 2 was expanded in 2011 to form a contiguous 156 acre MSW landfill.

CCR MANAGEMENT ACTIVITIES:

CCR and Non-CCR Waste Volumes:

Superior is currently permitted to receive 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. Waste streams accepted at this facility are in accordance with accordance with OCGA Solid Waste Management Rule 391-3-4.

The facility is permitted to receive a maximum CCR to non-CCR waste ratio (by weight) of 1 to 5. This translates into an estimated annual weight of 150,000 tons of CCR material with an estimated daily maximum of 565 tons. These limits are defined in Section 1 of the current Operational Narrative shown on Sheet 21 of the Design and Operation Plans. The CCR to non-CCR waste ratio limits were established by verifying that the facility's design can withstand the additional loads presented by the higher density CCR material. The basis of the design provided in the May 22, 2017 CCR Management Minor Modification was an overall waste mass density of 79 lb/CF (2,133 lb/CY). This density takes into account the elevated waste mass density with the introduction of the permitted upper limit of CCR into the waste stream.

The CCR material received at this facility between January 1, 2022 and December 31, 2022 had a total recorded weight of 83 tons. During this same period, the facility received 354,421 tons of non-CCR material which translates into an overall CCR to non-CCR waste ratio (by



weight) of 1 to 4,270. This ratio is below the upper limits established by the Operational Narrative and the facility's design calculations. This period indicates less than permitted levels of CCR disposal (by weight), therefore, the presence of the interned CCR material will not adversely affect the LF's global stability, base liner stability, leachate collection system capabilities or cause excessive base grade settlement.

The maximum amount of CCR received in any given day between January 1, 2022 and December 31, 2022 was 50 tons. This recorded total is less than the estimated max daily weight of 565 tons shown on Sheet 21 of the Design and Operation (D&O) Plans. Therefore, no adjustments are needed to the plan or design components related to stability, leachate collection or base grade settlement.

CCR Source:

The approved source of CCR material is from Southern Company facilities as required in Section 2 of the facility's Operational Narrative on Sheet 21 of the current Design and Operation Plan.

CCR Characterization and Compatibility:

Section 2 of the Operational Narrative on Sheet 21 requires CCR waste streams entering the facility to 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.

As noted, the material source and general physical characteristics have remained consistent since the CCR Management permit's initial issue date. Therefore, additional testing to verify characterization and compatibility have not been required. The original laboratory results upon which the CCR Management is based are repeated in Appendix A for reference.

CCR Placement, Compaction and Cover:

The facility is permitted to operate two independent working faces for the purpose of disposing CCR and non-CCR wastes in separate areas. Although disposal of CCR and non-CCR waste streams is an option, the facility co-mingled the CCR material received during the reporting period and only operated one working face for disposal of non-CCR material during this period. The maximum area of the working face and its management was conducted in accordance with Section 2 of the Operational Narrative on Sheet 21.

No leachate outbreaks were observed in layers of waste containing co-mingled CCR/non-CCR.

Additionally, none of the placed CCR material was harvested for beneficial re-use nor was it harvested for use in the facility's solidification process.



Record Keeping:

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

Fugitive Dust Control:

CCR material disposed at the facility was spread and compacted into the incoming waste stream as it was received. These layers/lifts of co-mingled material have remained covered during the current period by additional non-CCR layers as well daily and intermediate cover as required by the facility's Operational Procedures. This has prevented CCR material from exposure to the elements and has been successful in preventing the generation of fugitive dust.

The facility did not receive complaints related to dust between January 1, 2022 and December 31, 2022 and has remained compliant with requirements established by Air Quality Rule 391-3-1-.02(2)(n)1.

Leachate Collection and Removal System:

The facility's 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.

Stormwater Management System:

During disposal of co-mingled CCR and non-CCR material during this reporting period, 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 and by sloping the working face into the waste mass. Additionally, and as noted above, the disposed co-mingled materials have remained covered with non-CCR layers/lifts as well as daily and intermediate cover. Therefore, it has not been exposed to stormwater runoff nor has it discharged into the stormwater management system during the current reporting period.

Environmental Monitoring:

The environmental monitoring program for the facility was modified during development of the CCR Management Plan to include appropriate Appendix III/IV analytical parameters in accordance with United States Environmental Protection Agency recommendations and Georgia Environmental Protection Division Regulations. The monitoring network (consisting of groundwater wells, surface water, underdrain, and leachate monitoring points) and extended

Annual CCR Management Plan and Dust Control Report



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 and design parameters. Therefore, no plan modifications or local government notifications are required at this time.

CONCLUSION:

The current CCR Management routines required by the facility's Design and Operation Plan has 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.

Annual CCR Management Plan and Dust Control Report Appendix A



CCR Compatibility and Characterization

IN THIS APPENDIX:

Waste Compatibility Analysis

Annual CCR Management Plan and Dust Control Report Table of Contents



CCR Management Annual Report Page CCR MANAGEMENT ACTIVITIES......2 CCR and Non-CCR Waste Volumes2 Record Keeping4 Fugitive Dust Control4 Leachate Collection and Removal System4 Stormwater Management System......4 Environmental Monitoring......4 Emergencies5

Appendix A

CCR Compatibility and Characterization Data



This annual CCR management and dust control 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 Superior Landfill and Recycling Center is comprised of an active Municipal Solid Waste (MSW) Landfill (LF) unit designated Site No. 2 and a closed Municipal Solid Waste Landfill unit designated Site No. 1. The facility's current CCR Management Plan was established through a Design & Operation (D&O) Plan Update approved by Georgia's Environmental Protection Division (EPD) on August 12, 2022.

FACILITY LOCATION AND DESCRIPTION:

The existing landfill is located west of the intersection of Interstate 95 and Little Neck Road in Chatham County, Georgia. It is comprised of an active Municipal Solid Waste Landfill unit designated Site No. 2, Phase 1 (89 acres) and a closed Municipal Solid Waste Landfill unit designated Site No. 1 (26 acres). Site No. 2 was expanded in 2011 to form a contiguous 156 acre MSW landfill.

CCR MANAGEMENT ACTIVITIES:

CCR and Non-CCR Waste Volumes:

Superior is currently permitted to receive 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. Waste streams accepted at this facility are in accordance with accordance with OCGA Solid Waste Management Rule 391-3-4.

The facility is permitted to receive a maximum CCR to non-CCR waste ratio (by weight) of 1 to 5. This translates into an estimated annual weight of 150,000 tons of CCR material with an estimated daily maximum of 565 tons. These limits are defined in Section 1 of the current Operational Narrative shown on Sheet 21 of the Design and Operation Plans. The CCR to non-CCR waste ratio limits were established by verifying that the facility's design can withstand the additional loads presented by the higher density CCR material. The basis of the design provided in the May 22, 2017 CCR Management Minor Modification was an overall waste mass density of 79 lb/CF (2,133 lb/CY). This density takes into account the elevated waste mass density with the introduction of the permitted upper limit of CCR into the waste stream.

The CCR material received at this facility between January 1, 2022 and December 31, 2022 had a total recorded weight of 83 tons. During this same period, the facility received 354,421 tons of non-CCR material which translates into an overall CCR to non-CCR waste ratio (by



weight) of 1 to 4,270. This ratio is below the upper limits established by the Operational Narrative and the facility's design calculations. This period indicates less than permitted levels of CCR disposal (by weight), therefore, the presence of the interned CCR material will not adversely affect the LF's global stability, base liner stability, leachate collection system capabilities or cause excessive base grade settlement.

The maximum amount of CCR received in any given day between January 1, 2022 and December 31, 2022 was 50 tons. This recorded total is less than the estimated max daily weight of 565 tons shown on Sheet 21 of the Design and Operation (D&O) Plans. Therefore, no adjustments are needed to the plan or design components related to stability, leachate collection or base grade settlement.

CCR Source:

The approved source of CCR material is from Southern Company facilities as required in Section 2 of the facility's Operational Narrative on Sheet 21 of the current Design and Operation Plan.

CCR Characterization and Compatibility:

Section 2 of the Operational Narrative on Sheet 21 requires CCR waste streams entering the facility to 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.

As noted, the material source and general physical characteristics have remained consistent since the CCR Management permit's initial issue date. Therefore, additional testing to verify characterization and compatibility have not been required. The original laboratory results upon which the CCR Management is based are repeated in Appendix A for reference.

CCR Placement, Compaction and Cover:

The facility is permitted to operate two independent working faces for the purpose of disposing CCR and non-CCR wastes in separate areas. Although disposal of CCR and non-CCR waste streams is an option, the facility co-mingled the CCR material received during the reporting period and only operated one working face for disposal of non-CCR material during this period. The maximum area of the working face and its management was conducted in accordance with Section 2 of the Operational Narrative on Sheet 21.

No leachate outbreaks were observed in layers of waste containing co-mingled CCR/non-CCR.

Additionally, none of the placed CCR material was harvested for beneficial re-use nor was it harvested for use in the facility's solidification process.



Record Keeping:

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

Fugitive Dust Control:

CCR material disposed at the facility was spread and compacted into the incoming waste stream as it was received. These layers/lifts of co-mingled material have remained covered during the current period by additional non-CCR layers as well daily and intermediate cover as required by the facility's Operational Procedures. This has prevented CCR material from exposure to the elements and has been successful in preventing the generation of fugitive dust.

The facility did not receive complaints related to dust between January 1, 2022 and December 31, 2022 and has remained compliant with requirements established by Air Quality Rule 391-3-1-.02(2)(n)1.

Leachate Collection and Removal System:

The facility's 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.

Stormwater Management System:

During disposal of co-mingled CCR and non-CCR material during this reporting period, 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 and by sloping the working face into the waste mass. Additionally, and as noted above, the disposed co-mingled materials have remained covered with non-CCR layers/lifts as well as daily and intermediate cover. Therefore, it has not been exposed to stormwater runoff nor has it discharged into the stormwater management system during the current reporting period.

Environmental Monitoring:

The environmental monitoring program for the facility was modified during development of the CCR Management Plan to include appropriate Appendix III/IV analytical parameters in accordance with United States Environmental Protection Agency recommendations and Georgia Environmental Protection Division Regulations. The monitoring network (consisting of groundwater wells, surface water, underdrain, 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 and design parameters. Therefore, no plan modifications or local government notifications are required at this time.

CONCLUSION:

The current CCR Management routines required by the facility's Design and Operation Plan has 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.

Annual CCR Management Plan and Dust Control Report Appendix A



CCR Compatibility and Characterization

IN THIS APPENDIX:

Waste Compatibility Analysis



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

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

For:

Waste Management 1809 West Highway 80 Garden City, Georgia 31408

Attn: Ms. Sarah Rafalowski

Lathum 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

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.



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

Qualifiers

Quaimers	
GC/MS VOA	
Qualifier	Qualifier Description
Х	Surrogate is outside control limits
Metals	
Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
General Che	emistry
Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery

%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)

Matrix

Solid

Solid

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

Client Sample ID

Ash-Grumman

Ash-Kraft

Lab Sample ID

680-138279-1

680-138279-2

TestAmerica Job ID: 680-138279-1

Received

05/03/17 08:54

05/03/17 08:54

Collected

05/02/17 14:55

05/02/17 14:35

3	
5	
8	
9	

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

1 2 3 4 5 6 7 8 9 10 11

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.

RL

0.020

0.20

0.020

0.020

0.020

0.020

0.020

0.020

0.020

0.020

Limits

80 - 120

80 - 122

73 - 131

80 - 120

Unit

mg/L

D

Prepared

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

Client Sample ID: Ash-Kraft

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

Analyte

Benzene

2-Butanone (MEK)

Chlorobenzene

Chloroform

Carbon tetrachloride

1,2-Dichloroethane

1,1-Dichloroethene

Tetrachloroethene

Toluene-d8 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

1,2-Dichloroethane-d4 (Surr)

Trichloroethene

Vinyl chloride

Surrogate

TestAmerica Job ID	: 680-138279-1
--------------------	----------------

Analyzed

05/14/17 20:15

05/14/17 20:15

05/14/17 20:15

05/14/17 20:15

05/14/17 20:15

05/14/17 20:15

05/14/17 20:15

05/14/17 20:15

Lab Sample ID: 680-138279-1 Matrix: Solid

Dil Fac

20

20

20

20

20

20

20

20

5
8
9

	05/14/17 20:15	20	
	05/14/17 20:15	20	
Prepared	Analyzed	Dil Fac	
	05/14/17 20:15	20	
	05/14/17 20:15	20	
	05/14/17 20:15	20	
	05/14/17 20:15	20	

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

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

Result Qualifier

< 0.020

<0.20

< 0.020

<0.020

<0.020

<0.020

< 0.020

<0.020

< 0.020

<0.020

%Recovery Qualifier

112

96

86

102

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
Surrogata	& Passyony Qualifiar	Limito			Bronorod	Analyzed	

Surrogate	%Recovery	Qualifier	Limits	Prep	ared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		38 - 130	05/15/1	7 16:52	05/17/17 19:27	1
2-Fluorophenol (Surr)	66		25 _ 130	05/15/1	7 16:52	05/17/17 19:27	1
Nitrobenzene-d5 (Surr)	85		39 - 130	05/15/1	7 16:52	05/17/17 19:27	1
Phenol-d5 (Surr)	70		25 _ 130	05/15/1	7 16:52	05/17/17 19:27	1
Terphenyl-d14 (Surr)	83		10 - 143	05/15/1	7 16:52	05/17/17 19:27	1
2,4,6-Tribromophenol (Surr)	101		31 - 141	05/15/1	7 16:52	05/17/17 19:27	1

Method: 6010C - Metals (ICP) - TCLP

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

Client Sample Results

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

Client Sample ID: Ash-Kraft Date Collected: 05/02/17 14:55

Date Received: 05/03/17 08:54

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
рН	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	100.0			% Passing			05/04/17 18:54	1
Finer								
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

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 08:54

_

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

Lab Sample ID: 680-138279-2

Matrix: Solid

5

TestAmerica Job ID: 680-138279-1

Lab Sample ID: 680-138279-1

Matrix: Solid

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

5

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 Compou	nds (GC/MS	S) - TCLP					
Analyte		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 (CV/	AA) - TCLP							
Analyte		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
рН	8.0	HF		SU			05/11/17 15:19	1

Client Sample ID: Ash-Grumman Date Collected: 05/02/17 14:35

Date Received: 05/03/17 08:54

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	- 7
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	100.0			% Passing			05/04/17 18:57	1	
Finer									
Fines	41.5			%			05/04/17 18:57	1	
Sieve Size 0.375 inch - Percent	100.0			% Passing			05/04/17 18:57	1	
Finer				0 ′ D			05/04/47 40 57		
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	

TestAmerica Job ID: 680-138279-1

Lab Sample ID: 680-138279-2

Matrix: Solid

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

MB MB

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

5 6 7 8 9

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

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

		=						
Analyte	Result	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
	MB	МВ						
Surrogate	%Recovery	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

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 - 126 1,1-Dichloroethene 0.0500 0.0459 mg/L 92 80 - 120 Tetrachloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 93 71 - 123		Spike	LCS	LCS				%Rec.
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 - 126 1,1-Dichloroethene 0.0500 0.0459 mg/L 92 80 - 120 Tetrachloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 93 71 - 123	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
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 - 126 1,1-Dichloroethane 0.0500 0.0459 mg/L 92 80 - 120 Tetrachloroethene 0.0500 0.0490 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0459 mg/L 92 80 - 120 Trichloroethene 0.0500 0.0490 mg/L 92 80 - 120	Benzene	0.0500	0.0486		mg/L		97	80 - 120
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	2-Butanone (MEK)	0.250	0.212		mg/L		85	79 - 125
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	Carbon tetrachloride	0.0500	0.0475		mg/L		95	67 _ 125
1,2-Dichloroethane 0.0500 0.0445 mg/L 89 72 - 126 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	Chlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
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	Chloroform	0.0500	0.0454		mg/L		91	80 - 120
Tetrachloroethene 0.0500 0.0490 mg/L 98 71 - 123 Trichloroethene 0.0500 0.0485 mg/L 97 80 - 120	1,2-Dichloroethane	0.0500	0.0445		mg/L		89	72 _ 128
Trichloroethene 0.0500 0.0485 mg/L 97 80 - 120	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	Vinyl chloride	0.0500	0.0498		mg/L		100	80 - 129

	LCS	LCS	
Surrogate	%Recovery	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

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

TestAmerica Savannah

Prep Type: Total/NA

Spike

Added

0.0500

0.0500

0.0500

0.0500

0.0500

0.0500

0.0500

Limits

80 - 120

80 - 122

73 - 131

80 - 120

LCSD LCSD

0.0498

0.0446

0.0436

0.0441

0.0495

0.0479

0.0488

Result Qualifier

Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

D

%Rec

100

89

87

88

99

96

98

Lab Sample ID: LCSD 680-479788/4

Matrix: Solid

Chlorobenzene

1,2-Dichloroethane

1,1-Dichloroethene

Tetrachloroethene

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

1,2-Dichloroethane-d4 (Surr)

Toluene-d8 (Surr)

Trichloroethene

Vinyl chloride

Surrogate

Analyte

Chloroform

Analysis Batch: 479788

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

LCSD LCSD

%Recovery Qualifier

79 x

94

83

100

Prep Type: Total/NA

RPD

1

2

2

4

Client Sample ID: Lab Control Sample Dup

%Rec.

Limits

80 - 120

80 - 120

72 - 128

80 - 120

71 - 123

80 - 120

80 - 129

6

RPD

Limit

20

20

50

20

		(2	l	e	er	1	t	S	3	a	n	n	p	e)	Ν	e	tl	h	C	0	ł	E	3	k	a	n	k

Prep Type: TCLP

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

	LB	LB						
Analyte	Result	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

	LB	LB				
Surrogate	%Recovery	Qualifier	Limits	Prepai	red Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			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

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Client Sample ID: Ash-Grumman

Client Sample ID: Ash-Grumman

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

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

Watrix. S	unu	
Analysis	Patch:	470700

Analysis Batch: 479788										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	

	MS M	//S	
Surrogate	%Recovery 0	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

1,2-Dichloroethane-d4 (Surr)

Toluene-d8 (Surr)

Analysis Datch. 415100											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	86		80 - 120								
Dibromofluoromethane (Surr)	97		80 - 122								

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

86 97

Lab Sample ID: MB 680-479935/ Matrix: Solid Analysis Batch: 480308	20-А мв	мв				Client Sa	mple ID: Metho Prep Type: T Prep Batch:	otal/NA
Analyte	Result	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

73 _ 131

80 - 120

Prep Type: TCLP

Prep Type: TCLP

6

Lab Sample ID: MB 680-479935/20-A

Matrix: Solid

Pentachlorophenol

2,4,5-Trichlorophenol

2,4,6-Trichlorophenol

2-Fluorobiphenyl (Surr)

2-Fluorophenol (Surr)

Nitrobenzene-d5 (Surr)

Terphenyl-d14 (Surr)

2,4,6-Tribromophenol (Surr)

Phenol-d5 (Surr)

Analyte

Pyridine

Surrogate

Analysis Batch: 480308

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

MB MB

MB MB

72

61

73

70

95

99

Qualifier

< 0.050

< 0.050

<0.010

<0.010

%Recovery

Result Qualifier

Client Sample ID: Method Blank

Analyzed

05/17/17 16:21

05/17/17 16:21

05/17/17 16:21

05/17/17 16:21

05/17/17 16:21

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 479935

	J
Dil Fac	
1	6
1	
1	
1	
	8
Dil Fac	
1	9
1	
1	
1	

1

1

Prepared Analyzed 05/15/17 16:52 05/17/17 16:21 05/15/17 16:52 05/17/17 16:21 05/15/17 16:52 05/17/17 16:21 05/15/17 16:52 05/17/17 16:21 05/15/17 16:52 05/17/17 16:21

Prep Type: Total/NA

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

Analysis Batch: 480308							Prep Batch: 479935
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%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

	LCS	LCS	
Surrogate	%Recovery	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

	LB	LB					
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 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

Client Sample ID: Method Blank

RL

0.050

0.050

0.010

0.010

Limits

38 - 130

25 - 130

39 - 130

25 - 130

10 - 143

31 - 141

Unit

mg/L

mg/L

mg/L

mg/L

D

Prepared

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

Prep Type: TCLP

Prep Batch: 479935

RL

0.050

0.050

0.050

0.050

0.25

0.25

0.050

0.050

Limits

38 - 130

25 - 130

39 - 130

25 - 130

10 - 143

31 - 141

Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

D

Prepared

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

05/15/17 16:52

Prepared

Lab Sample ID: LB 680-479476/1-D

Matrix: Solid

Hexachloroethane

3 & 4 Methylphenol

Pentachlorophenol

2,4,5-Trichlorophenol

2,4,6-Trichlorophenol

2-Fluorobiphenyl (Surr)

2-Fluorophenol (Surr)

Nitrobenzene-d5 (Surr)

Terphenyl-d14 (Surr)

2,4,6-Tribromophenol (Surr)

Phenol-d5 (Surr)

2-Methylphenol

Nitrobenzene

Pyridine

Surrogate

Analyte

Analysis Batch: 480308

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

LB LB Result Qualifier

< 0.050

<0.050

<0.050

<0.050

<0.25

<0.25

< 0.050

< 0.050

%Recovery

LB LB

74

66

80

68

93

93

Qualifier

Client Sample ID: Method Blank

Analyzed

05/17/17 16:44

05/17/17 16:44

05/17/17 16:44

05/17/17 16:44

05/17/17 16:44

05/17/17 16:44

05/17/17 16:44

05/17/17 16:44

Analyzed

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Drop Botoby 470025

Prep Type: TCLP

Dil Fac

1

1

1

1

Prep Batch: 479935

2 3 4 5 6

1	8
1	
1	
Dil Fac	
1	

05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1 05/15/17 16:52 05/17/17 16:44 1

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

Analysis Batch: 480308									Prep Bat	cn: 479935
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	

	MS	MS	
Surrogate	%Recovery	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

5

6

Lab Sample ID: 680-138279-	2 MSD						•	Client Sa	ample ID: A	sh-Gru	mman
Matrix: Solid									Pre	p Type:	TCLP
Analysis Batch: 480308									Prep I	Batch: 4	79935
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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
	MSD	MSD									
Surrogate	%Recovery	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/ Matrix: Solid Analysis Batch: 479888						Client Sa	mple ID: Metho Prep Type: T Prep Batch:	otal/NA
Analyte		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

Analysis Batch: 479888							Prep Ba	tch: 479683
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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

Lab Sample ID: LB 680-479476/1-B

Matrix: Solid

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

Client Sample ID: Ash-Kraft

Prep Type: TCLP Prep Batch: 479683

Analysis Batch: 479888 LB LB Result Qualifier Unit Dil Fac Analyte RL D Prepared Analyzed 05/12/17 12:11 <0.20 0.20 05/12/17 19:08 Arsenic mg/L 1 Barium 05/12/17 12:11 <1.0 1.0 mg/L 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 <0.20 0.20 Lead 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 05/12/17 12:11 05/12/17 19:08 mg/L 1

Lab Sample ID: 680-138279-1 MS Matrix: Solid

Analysis Batch: 479888

-	Sample Sam	ple Spike	MS	MS				%Rec.	
Analyte	Result Qual	ifier Added	Result	Qualifier	Unit	D	%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 **Client Sample ID: Ash-Kraft** Matrix: Solid Prep Type: TCLP Analysis Batch: 479888 Prep Batch: 479683 Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <0.20 1.60 20 Arsenic 1.38 mg/L 86 75 - 125 3 Barium <1.0 1.60 1.99 124 75 - 125 20 F1 mg/L 3 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 20 3 Selenium <0.50 1.60 1.25 mg/L 78 75 - 125 1 20 Silver <0.10 1.60 1.42 89 75 - 125 3 20 mg/L

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-479700/1-A Matrix: Solid Analysis Batch: 479930	мв	МВ							Client Sa	Imple ID: Metho Prep Type: 1 Prep Batch	Total/NA
Analyte	Result	Qualifier	RL		Unit		D	Pr	epared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L			05/12	2/17 14:02	05/15/17 10:45	1
							CI	ient	Sample	ID: Lab Control	Sample
Matrix: Solid										Prep Type: 1	Total/NA
Analysis Batch: 479930										Prep Batch	479700
			Spike	LCS	LCS					%Rec.	
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits	
Mercury			0.250	0.252		mg/L			101	80 - 120	

2 3 4 5 6 7 8 9 10 11

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

Lab Sample ID: LB 680-479476/1-C Matrix: Solid									Client Sa	mple ID: Mo Prep		Blank TCLP
Analysis Batch: 479930										Prep Ba		
		LB LB										
Analyte	R	esult Qualifier		RL	Unit		D	P	repared	Analyzed		Dil Fac
Mercury	<(0.020		0.020	mg/L			05/1	2/17 14:02	05/15/17 11	08	1
_ Lab Sample ID: 680-138279-1 MS									Clier	nt Sample II): Asł	n-Kraft
Matrix: Solid												TCLP
Analysis Batch: 479930										Prep Ba		
-	Sample	Sample	Spike	MS	MS					%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits		
Mercury	<0.020		0.0830	0.0742		mg/L			89	80 - 120		
Lab Sample ID: 680-138279-1 MSD									Clier	nt Sample II): Asł	n-Kraft
Matrix: Solid												TCLP
Analysis Batch: 479930										Prep Ba		
•	Sample	Sample	Spike	MSD	MSD					%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits	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 S	ample ID: Metho Prep Type: T	
	MB	MB						
Analyte	Result	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 S	ample ID: Meth Prep Type: Prep Batch	Total/NA
Analyte	MB Result	MB Qualifier		RL		Unit		D	Р	repared	Analyzed	Dil Fac
Cyanide, Reactive	<0.25			0.25		mg/K	g			8/17 14:03	05/09/17 14:45	1
_ Lab Sample ID: LCS 400-352497/2-A								Cli	ient	Sample	ID: Lab Contro	I Sample
Matrix: Solid											Prep Type:	Total/NA
Analysis Batch: 352951											Prep Batch	: 352497
			Spike		LCS	LCS					%Rec.	
Analyte			Added	F	Result	Qualifier	Unit		D	%Rec	Limits	
Cyanide, Reactive			1.00		<0.25		mg/Kg		_	16	0 _ 50	

Client Sample ID: Method Blank

5 6

pared	Analyzed	DIIFac
17 14:03	05/09/17 12:02	1
ample II): Lab Control Prep Type: 1	

Method:	9034 -	Sulfide.	Reactive
methou.	3004 -	ounac,	I Cachive

Lab Sample ID: MB 400-352498/1-A

Matrix: Solid Analysis Batch: 352921										Prep Ty Prep B	-	
Analysis Datch. 352921		МВ МВ								гтер Б	aten. s	JJZ4JU
Analyte	Re	sult Qualifi	er	RL	Un	it	D	Р	repared	Analyze	d	Dil Fac
Sulfide, Reactive	<	150		150	mg	/Kg		05/0	8/17 14:03	05/09/17 1	2:02	1
- Lab Sample ID: LCS 400-352498/2-A							С	lient	Sample	ID: Lab Co	ntrol S	ample
Matrix: Solid										Prep Ty		
Analysis Batch: 352921										Prep B		
· · · · · · · · · · · · · · · · · · ·			Spike	LCS	LCS					%Rec.		
Analyte			Added	Result	Qualifie	Unit		D	%Rec	Limits		
Sulfide, Reactive			1000	155		mg/Kg		· _	15	0 - 80		
/lethod: 9045D - pH												
Lab Sample ID: LCS 680-479207/1							C	lient	Sample	ID: Lab Co Prep Ty		
Lab Sample ID: LCS 680-479207/1 Matrix: Solid			Spike	LCS	LCS		C	lient	Sample			
Lab Sample ID: LCS 680-479207/1 Matrix: Solid			Spike Added		LCS Qualifier	. Unit	C	lient D	Sample %Rec	Prep Ty		
Lab Sample ID: LCS 680-479207/1 Matrix: Solid Analysis Batch: 479207			-			· <u>Unit</u> S.U.	C		·	Prep Ty %Rec.		
Lab Sample ID: LCS 680-479207/1 Matrix: Solid Analysis Batch: 479207 Analyte			Added	Result			C		%Rec	Prep Ty %Rec. Limits	pe: To	tal/NA
Lab Sample ID: LCS 680-479207/1 Matrix: Solid Analysis Batch: 479207 Analyte pH Lab Sample ID: 680-138279-1 DU			Added	Result			C		%Rec	Prep Ty %Rec. Limits 79 - 126	iD: Ast	n-Kraft
Lab Sample ID: LCS 680-479207/1 Matrix: Solid Analysis Batch: 479207 Analyte pH			Added	Result			C		%Rec	Prep Ty %Rec. Limits 79 - 126	iD: Ast	n-Kraft
Lab Sample ID: LCS 680-479207/1 Matrix: Solid Analysis Batch: 479207 Analyte pH Lab Sample ID: 680-138279-1 DU Matrix: Solid Analysis Batch: 479207	Sample 3	Sample	Added	Result 7.1			C		%Rec	Prep Ty %Rec. Limits 79 - 126	iD: Ast	n-Kraft
Lab Sample ID: LCS 680-479207/1 Matrix: Solid Analysis Batch: 479207 Analyte pH Lab Sample ID: 680-138279-1 DU Matrix: Solid Analysis Batch: 479207	•	Sample Qualifier	Added	Result 7.1 DU	Qualifier	— <u>S.U.</u>	C		%Rec	Prep Ty %Rec. Limits 79 - 126	iD: Ast	n-Kraft

QC Association Summary

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

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

QC Association Summary

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

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

Г

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

QC Association Summary

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

General Chemistry

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
80-138279-1	Ash-Kraft	Total/NA	Solid	7.3.3	
80-138279-2	Ash-Grumman	Total/NA	Solid	7.3.3	
IB 400-352497/1-A	Method Blank	Total/NA	Solid	7.3.3	
CS 400-352497/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	
ep Batch: 352498					
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
80-138279-1	Ash-Kraft	Total/NA	Solid	7.3.4	
80-138279-2	Ash-Grumman	Total/NA	Solid	7.3.4	
IB 400-352498/1-A	Method Blank	Total/NA	Solid	7.3.4	
CS 400-352498/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
alysis Batch: 35292	1				
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
80-138279-1	Ash-Kraft	Total/NA	Solid	9034	35249
80-138279-2	Ash-Grumman	Total/NA	Solid	9034	3524
IB 400-352498/1-A	Method Blank	Total/NA	Solid	9034	3524
CS 400-352498/2-A	Lab Control Sample	Total/NA	Solid	9034	3524
nalysis Batch: 35295 Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
80-138279-1	Ash-Kraft	Total/NA	Solid	9014	35249
80-138279-2	Ash-Grumman	Total/NA	Solid	9014	35249
/IB 400-352497/1-A	Method Blank	Total/NA	Solid	9014	35249
.CS 400-352497/2-A	Lab Control Sample	Total/NA	Solid	9014	35249
alysis Batch: 47920	7				
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
80-138279-1	Ash-Kraft	Total/NA	Solid	9045D	
80-138279-2	Ash-Grumman	Total/NA	Solid	9045D	
CS 680-479207/1	Lab Control Sample	Total/NA	Solid	9045D	
80-138279-1 DU	Ash-Kraft	Total/NA	Solid	9045D	
nalysis Batch: 47926	0				
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
80-138279-1	Ash-Kraft	Total/NA	Solid	1030	
80-138279-2	Ash-Grumman	Total/NA	Solid	1030	
1B 680-479260/2	Method Blank	Total/NA	Solid	1030	
eotechnical					
concentrical					

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	

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

Lab Sample ID: 680-138279-1

Matrix: Solid

2 3 4 5 6 7 8 9 10 11 12

Client Sample ID: Ash-Kraft

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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
	Instrume	nt 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
	Instrume	nt 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
	Instrume	nt 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
	Instrume	nt ID: LEEMAN2								
Total/NA	Analysis	1030		1			479260	05/10/17 08:38	LWB	TAL SAV
	Instrume	nt 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
	Instrume	nt 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
	Instrume	nt ID: NOEQUIP								
Total/NA	Analysis	9045D		1	20.12 g	20 mL	479207	05/11/17 15:19	LWB	TAL SAV
	Instrume	nt ID: NOEQUIP								
Total/NA	Analysis	D422		1			116526	05/04/17 18:54	VTP	TAL BUR
	Instrume	nt 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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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
	Instrume	nt 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
	Instrume	nt 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
	Instrume	nt ID: ICPE								

TestAmerica Savannah

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

Client Sample ID: Ash-Grumman

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

Lah	Comple	ID.	COO 420270
Lab	Sample	IU:	680-138279-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrume	7470A nt ID: LEEMAN2		1			479930	05/15/17 11:28	JKL	TAL SAV
Total/NA	Analysis Instrume	1030 nt ID: NOEQUIP		1			479260	05/10/17 08:38	LWB	TAL SAV
Total/NA	Prep	7.3.3			10 g	100 mL	352497	05/08/17 15:20	CLM	TAL PEN
Total/NA	Analysis Instrume	9014 nt ID: KONELAB		1	10 mL	10 mL	352951	05/09/17 14:45	CLM	TAL PEN
Total/NA	Prep	7.3.4			10 g	100 mL	352498	05/08/17 15:20	CLM	TAL PEN
Total/NA	Analysis Instrume	9034 nt ID: NOEQUIP		1	100 mL	100 mL	352921	05/09/17 12:02	CLM	TAL PEN
Total/NA	Analysis Instrume	9045D nt ID: NOEQUIP		1	19.70 g	20 mL	479207	05/11/17 15:19	LWB	TAL SAV
Total/NA	Analysis Instrume	D422 nt ID: D422_import		1			116526	05/04/17 18:57	VTP	TAL BUR

Laboratory References:

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

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

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

TestAmerica Savannah

Accreditation/Certification Summary

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

5

9

Laboratory: TestAmerica Savannah

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

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

Laboratory: TestAmerica Burlington

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

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

Laboratory: TestAmerica Pensacola

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

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

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

Accreditation/Certification Summary

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

Laboratory: TestAmerica Pensacola (Continued)

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

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

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

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

10

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	рН	SW846	TAL SAV
0422	Grain Size	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International

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

Laboratory References:

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

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

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

TestAmerica Savannah

5102 LaRoche Avenue		Chain	Chain of Custody Record		IESTAMERICO
Savannah, CA 31404 Phone: 912.354.7858 Fax:	Regulatory Program:	DW NPDES	X RCRA Other:		THE LEADER IN ENVIRONMENTAL TESTING TestAmerica Laboratories, Inc. TAL-8210 (0713)
Client Contact	Project Manager: Chir Ah	Kataloud	Site Contact:	Date: 5/2/17.	COC No:
Company Name: WN]-Superior		mog. ma	Lab Contact: Lisca Harved	Carrie	of COCs
H++7	Turnar		~		Sampler:
City/State/Zip: Sourannoh, GA 31419	X CALENDAR DAYS	WORKING DAYS	F		For Lab Use Only:
Phone: 770-545-0339	TAT If different from Below		エジス		Walk-in Client:
Fax: Project Name: Achieved Achieved No. 1			Z III		Lab Sampling:
Site: SI> Derior Londari (2 days				Job / SDG No.:
PO#	1 day				
	Sample Sample Type	#of	ared Sa form M and and and and and and and and and and		
Sample Identification	Time Geo	Matrix Cont.	Par Kar		Sample Specific Notes:
tsh - Kratt	5P 0550 G	Ach 3	後		Nerl ampair
Ash - Grumman	512 D.33 G	AA	* 1 1 1		100
					ION + IMM
					£
Preservation Used: 1= Ice. 2= HCI: 3= H2SO4: 4=HNO3:	3: 5=NaOH: 6= Other				
	ase List any EPA Waste Codes fo	or the sample in the	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	e assessed if samples are reta	ined longer than 1 month)
Non-Hazard Remmable Skin Instant	Polson B	Unknown	Return to Client	Disposal by Lab	or Months
Instructions/QC Requirements & Comm				0	
JIR WEEK INI, IT POSIDIO	10101			017. 10.1	
Curst dy Seals Intact: Yes No	Custody Seal No.:		Cooler Temp. (°C): Obs'd		Therm ID No.:
induisible of the second se	Company:	S-3/C.S	Na Received by: V. Jacky Val	of Company: TA	S.S. LI & SH
Relinfolished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
nquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time;

	TestAmerica Savannah 5102 LaRoche Avenue Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165		Chain o	of Custody Record	tody R	ecord		0-138279	9 Chain 6	680-138279 Chain of Custody			COLOR HE LEADER MI	
State Test Entry		Sampler:			Lab F Smir	M: th, Kathryn	ш					0000	0-476579.1	
Bench Laborations, Inc. Description (and inclusion) De	Client Contact: Shipping/Receiving	Phone:			E-Ma kath	il: v.smith@te	estameric	ainc.com		State of O	rigin:	Pag	ge: Inde 1 of 1	
Buildington Solid 1, Control Manual Sequence Manual Sequence Manual Sequence Manual Sequence Buildington Solid 1, Control None Manual Sequence Manual Sequence Manual Sequence Manual Sequence Buildington Solid 1, Control None Manual Sequence Man	Company: TestAmerica Laboratories, Inc.					Accreditation State Proc	ns Required	l (See note):		5		dol dol	800 - 01 - 0 #: 0 4280770 4	
Building Constrained Constrained <thconstrained< th=""> <thconstrained< th=""> <t< td=""><td></td><td>Due Date Requested 5/9/2017</td><td></td><td></td><td></td><td></td><td></td><td>Anal</td><td>Veis</td><td>nijected</td><td></td><td>Pre</td><td>eservation Co</td><td>odes:</td></t<></thconstrained<></thconstrained<>		Due Date Requested 5/9/2017						Anal	Veis	nijected		Pre	eservation Co	odes:
05 05<	uth Burlinaton	TAT Requested (da)	s):									A-	- HCL - NaOH	M - Hexane N - None
O: 100(10) B2260-110(16(so) Oral Oral <thoral< th=""> Oral</thoral<>	State, Zip: VT, 05403						071					ĊĊШ	- Zn Acetate - Nitric Acid - NaHSO4	0 - AsNaO2 P - Na2O4S Q - Na2SO3
Term Term <th< td=""><td>60-1990(Tel)</td><td>PO#:</td><td></td><td></td><td></td><td>1</td><td>"# əvəi</td><td></td><td></td><td></td><td></td><td>цо</td><td>- MeOH - Amchlor</td><td>R - Na2S2O3 S - H2SO4</td></th<>	60-1990(Tel)	PO#:				1	"# əvəi					цо	- MeOH - Amchlor	R - Na2S2O3 S - H2SO4
Officiarii Dimension Dimension <thdiman< th=""> <thdiman< th=""> Dimensi</thdiman<></thdiman<>		:# OM				ol 10	s utiw :						- Ascorbic Acid Ice · DI Water	I - ISP Dodecanydra U - Acetone V - MCAA
Solution	Project Name: Superior Landfill Waste Char.	Project #: 68018153				j. Lini							- EDTA · EDA	W - pH 4-5 Z - other (specify)
Summary identification - Client (D (Lab D)) Sample (arreit (D (Lab D))) Sample (arreit (D (La	Site	:#MOSS											her:	
Sample Identification - Client ID (LeDU) Sample IdentiD (LeDU) Sample Identificat			Samule	Sample Type (C=comp	Matrix (w=water, s=solid,	19. S) tedmy (1		
All-Cummari (600-13279-1) 572/T 445 month X x month x x month 1 1 All-Cummari (600-13279-2) 572/T 4430 500/L X X N N X N <t< td=""><td>Sample Identification - Client ID (Lab ID)</td><td>Sample Date</td><td>Hime</td><td>G=grab)</td><td>BT=Tissue, A=Air</td><td></td><td>- 10 10</td><td></td><td></td><td></td><td></td><td>101</td><td>Special I</td><td>Instructions/Note:</td></t<>	Sample Identification - Client ID (Lab ID)	Sample Date	Hime	G=grab)	BT=Tissue, A=Air		- 10 10					101	Special I	Instructions/Note:
Afri-Carimman (600-132279-2) 5/21/1 4000 1	Ash-Kraft (680-138279-1)	5/2/17	14:55		Solid		24 87		£			X -		
And the second secon	Ash-Grumman (680-138279-2)	5/2/17	14:35		Solid	×								-
Maintonia en subjecto change, Textorente Laboratione, Textorente Laboratintere Laboratione, Textorente Laboratinter Lab			Lagici									i site i Z Anilis		
We have a subject of drags. Trackmental altomatories. Image: Since laboration confidence are subject of drags. Trackmental altomatories. Image: Since laboration confidence are subject of drags. Trackmental altomatories. We the character of confidence are subject of drags. Trackmental altomatories. Image: Since laboration confidence are subject of drags. Trackmental altomatories. Image: Since laborations. Image: Since laboratio														
We have a subject to change, Testometria Laboratoria, Inc. places the conversite of method, analyse & accerditation compliance upon cut abcorntact laboratoria. Intel Inc. Inc. Inc. Inc. Inc. Inc. Inc. Inc.														
Were Since laboratory correlations are subject to change. Test/merical Laboratories, Test Americal Laboratories, Test American Laboratories														
With the standard of the standard of the standard and the standard and the standard of the stan														
Over Since laboratory accreditation are subject to change. Technnetica Laboratories, Inc. attention in the State of Origin listed above for analysis extendiations are subject back, to the Technetica Laboratories. This sample symmetric suboratories in cuastration in the State of Origin listed above for analysis extendiations are subject back, to the Technetica Laboratories. This sample symmetric suboratories, Inc. attention in the State of Origin listed above for analysis extendiations are current to date, return of Clastory attesting to said compliance upon out subcontract laboratories. This sample symmetric suboratories, Inc. attention in the State of Origin listed above for analysis excertations are current to date, return of Clastory attesting to said compliance to the Structure of Department in the State of Origin listed above for analysis excertations are current to date, return 70 Clastory attesting to said complexe to the Structure of Department in Clastory attesting to said on Provides, Inc. Possible Hazard Identification Unconfirmed Earlum 70 Client Disposal II samples are retained longer than 1 month) Unconfirmed Empty Kit Relinquished by: Date: Inconfirmed Menturn 70 Client Disposal II aboversion Minimations Empty Kit Relinquished by: Date: Date: Inconfirmed Menturn 70 Client Disposal II aboversion Minimations Empty Kit Relinquished by: Date: Inconfirmed Inconfirmed Menturn 70 Client Date/Inconfirmed Minimations Empty Kit Relinquished by: Date: Inconfirmed														
Sample Disposal (A fee may be assessed if samples are retained longer than 1 m Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 m Primary Deliverable Rank: 2 Special Instructions/QC Requirements: Date: Time: Method of Shipment: Date: Company Releved by: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Company Received by: Date/Time: Date/Time: Bate/Time: Company Received by: Date/Time: Date/Time: Bate/Time: Company Received by: Date/Time: Date/Time:	Note: Since laboratory accreditations are subject to change, TestAmerica Labo currently maintain accreditation in the State of Ongin listed above for analysis/ Laboratories, Inc. attention immediately. If all requested accreditations are cur	L oratories, Inc. places the owr tests/matrix being analyzed, rrent to date, return the signe	L lership of meth the samples m d Chain of Cus	ا od, analyte & ء ust be shipped stody attesting	accreditation co back to the Te to said complic	ompliance upo estAmerica lab ance to TestA	n out subco oratory or o merica Lab	ntract labor ther instruct oratories, In	atories. Thi ions will be c.	s sample ship provided. An	L L ment is forward y changes to	rded under chain-of- accreditation status s	custody. If the lishould be broug	laboratory does not ght to TestAmerica
Primary Deliverable Rank: 2 Return To Client Disposal By Lab Archive For Date: Date: Itime: Method of Shipment: DateTime: DateTime: Method of Shipment: DateTime: DateTime: Method of Shipment: DateTime: Company Reverted by DateTime: DateTime: Company Received by: DateTime: DateTime: Company Received by: DateTime: DateTime: Company Received by: DateTime:	Possible Hazard Identification					Sampl	le Dispos	sal (A fee	may be	assessed	if sample	s are retained lo	onger than 1	month)
Date: Date: Time: Method of Shipment. Received by: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Company Received by: Date/Time: Custody Seal No: 35 & 85 Å Cooler Temperature(s) °C and Other Remarks: L3 C	oncommed Deliverable Requested: I, II, III, IV, Other (specify)	Primary Delivera	ole Rank: 2			Specia	Return To	o Client ions/QC F	Requiremo	Disposal B ents:	y Lab	Archive Fo	or	Months
Lead Date/Time. Lot Company Releved by. Date/Time. Date/Time. Date/Time. Company Received by. Date/Time. Date/Time. Date/Time. Company Received by. Date/Time. Custody Seal No.: GS & SS A Cooler Temperature(s) °C and Other Remarks. L 3 °C	Empty Kit Relinquished by:		Date:			Time:				Meth	nod of Shipm	ent:		
Later Ime: Later Ime: Dater Time: Dater Time: Dater Time: als Intact: Custody Seal No.: △ No Cooler Temperature(s) °C and Other Remarks: ↓ No		S/3/17		1221	Company		teived by	50	¢\$		Date	E	30	Company THE ISS. R.C.
Custody Seal No: 356857 Cooler Temperature(s) °C and Other Remarks: 1,3°C	Peringuished by:	Date/Time:			Company	Tec Rec	ceived by: ceived by:				Date	Time: Time:		Company
	Custody Seal No.:	854				Ö	oler Temper	ature(s) °C	and Other I	temarks:	6			



TestAmerica Savannah 5102 LaRoche Avenue	O	Chain o	f Cust	of Custody Record	cord					TestAmerico	erica
Javanilali, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165									THE LEAD	THE LEADER IN ENVIRONMENTAL TESTING	ENTAL TESTING
Client Information (Sub Contract Lab)	Sampler.			Lab PM: Smith,	Lab PM: Smith, Kathryn E		-	Carrier Tracking No(s):	COC No: 680-476581.1	581.1	
Client Contact Shipping/Receiving	Phone:			E-Mail: kathy.s	smith@test	E-Mail: kathy.smith@testamericainc.com		State of Origin: Georgia	Page: Page 1 of 1	of 1	
Company: TestAmerica Laboratories, Inc.				∢ Ω	ccreditations tate Progra	Accreditations Required (See note): State Program - Georgia			Job #: 680-138279-1	279-1	
Address 3355 McLemore Drive,	Due Date Requested 5/9/2017					Ana	Analysis Requested	lested	Preservat	Po:	
City. Pensacola	TAT Requested (days):	rs);							B - HCL B - NaOH C - Zn Acetate		M - Hexane N - None O - AsNaO2
State, Zp: FL, 32514					-				E - Nitric A E - NaHSC		04S SO3
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	HO4			(0		9/			G - Amchlor H - Ascorbic Acid		04 Dodecahvdrate
Email:	:# OM				(0)	7eactiv					one
Project Name: Superior Landfill Waste Char.	Project #: 68018153				l 10 se	iffide, F					4-5 r (specify)
Site	#MOSS) as	nS 4.5.			of con		
		Sample	Sample Type (C=comp,	Matrix (W=water, S=solid, O=wasteroli,	eld Filtered S M/SM mS/M DevitveG_4h	TlevitoseA_45			TedmuN Isto		
Sample Identification - Client ID (Lab ID)	Sample Date		Preserva	Preservation Code:	J	06				Special Instructions/Note:	ons/Note:
Ash-Kraft (680-138279-1)	5/2/17	14:55		Solid	×	×			-		
Ath Caumana (600 12070 2)	E 1014 7	Eastern 14:35		Colid	>	>					
	01211	Eastern		200	<	<			-		
							-				
					-						
Note: Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testSimatirx being analyzed, the shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories. In c. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories. In c. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories. In c.	loratories, Inc. places the ow /tests/matrix being analyzed rrent to date, return the sign.	mership of meth the samples m ed Chain of Cut	nod, analyte & tust be shippe stody attesting	accreditation corr d back to the Test t to said complicar	Ipliance upon America labo	out subcontract labo ratory or other instru nerica Laboratories, I	oratories. This s ctions will be pro Inc.	ample shipment is forwarded ur ovided. Any changes to accredi	nder chain-of-custody itation status should	ly. If the laboratory d be brought to TestA	loes not merica
Possible Hazard Identification					Sample	Disposal (A fe	se may be as	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	retained longer	r than 1 month)	
Unconfirmed		-				Return To Client		osal By Lab	Archive For	Months	IS
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Ran	able Rank: 2			Special	Special Instructions/QC Requirements	Requiremen	ts:			
Empty Kit Relinquished by:		Date:		\Box	Time:	0		Method of Shipment:			
Relinduished by DDDee, Rollasond Relinquished by	Date/Time: Date/Time:		127	Company	Rec	Received by: Received by:		Date/Time:	0 6	ORSI Company	, uny
Balintuichad hv:	Date/Time			Company	Rec	Received by		Date/Time		Comman	
				Company		cived by.					Á.
Custody Seals Intact: Custody Seal No.:					ő	Cooler Temperature(s) °C and Other Remarks	C and Other Re	Marks: 3,3JR2			
						12	11	8 9 1(6	4	1 2 3
						2					

Login Sample Receipt Checklist

Client: Waste Management

Login Number: 138279 List Number: 1

Creator: Jackson, Victor L

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

List Source: TestAmerica Savannah

Client: Waste Management

Login Number: 138279 List Number: 3

Creator: Cota, Fred P

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td>Lab does not accept radioactive samples.</td>	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

List Source: TestAmerica Burlington

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

Client: Waste Management

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

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

List Source: TestAmerica Pensacola

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